UNIVERSITÉ DE SHERBROOKE
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The evolution of fourth year BEALS students' beliefs and practices when teaching ESL related to formative assessment

par

Alexandre Alves Mesquita

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a été évalué par un jury composé des personnes suivantes:

Professor Enrique Correa Molina	Président du jury
Professor Lynn Thomas	Directrice de recherche
Professor Marilyn Steinbach	Codirectrice de recherche
Professor Isabelle Nizet	Membre du jury interne
Professor Christopher Deluca	Membre du jury externe
Professor Beverly Baker	Membre du jury externe

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Abstract

This qualitative exploratory study investigates the evolution of pre-service teachers' beliefs and practices of formative assessment when teaching English as a Second language (ESL) in Québec through the scope of three main elements: their prior beliefs (Calderhead, 1988; Levin, 2015; Lortie, 1975; Pajares, 1992), their practicum experiences and their formal courses (Beck & Kosnik, 2000; Britzman, 2003; DeLuca, Chavez, Bellara & Cao, 2013; DeLuca & Lam, 2014; Grossman, Valencia & Hamel, 1997). The data was collected with 6 pre-service ESL teachers in three phases using the following methods: (a) at the beginning of the fourth year through an open-ended questionnaire (based on James and Pedder's (2006) 30-item questionnaire) and semi-structured interviews (Bogdan & Biklen, 2007); (b) while on practicum through stimulated recall interviews and narratives (Connelly & Clandinin, 1990; Lichman, 2006); and (c) at the end of the fourth year through open-ended questionnaires and semi-structured interviews. Based on the findings, fourth-year pre-service ESL teachers' beliefs and practices related to formative assessment evolve according to following elements: prior beliefs; associate teachers' and university supervisors' roles and support; university courses; and personal reflections on their own learning. The findings of this study further our understanding of the impacts of pre-service ESL teachers' beliefs on how they construct their knowledge about formative assessment throughout their teacher education programme. It also highlights the need for teacher educators, associate teachers and university supervisors to take pre-service teachers' beliefs and prior experiences into consideration in order to provide pre-service teachers with meaningful and adequate preparation for their future professional roles.

Keywords: *Formative assessment, pre-service teachers' beliefs and practices, teacher education*

Résumé

Cette étude examine comment les futurs enseignants d'anglais langue seconde apprennent à évaluer de façon formative à travers le champ d'application de trois éléments principaux : leurs croyances (Calderhead, 1988; Levin, 2015; Lortie, 1975; Pajares, 1992), les stages et les cours de méthodologies d'enseignement (Beck & Kosnik, 2000; Britzman, 2003; DeLuca et al., 2013; DeLuca & Lam, 2014; Grossman, Valencia & Hamel, 1997). Les données ont été recueillies avec six participants par les méthodes suivantes: questionnaires ouverts (Dörnyei, 2010), des interviews semi-structurées (Bogdan & Biklen, 2007); rappel stimulé et récits (Connelly & Clandinin, 1990; Lichman, 2006). Les résultats indiquent que les croyances et pratiques d'enseignement et d'évaluation formative de leurs enseignants associés affecte le développement professionnel des futurs enseignants en raison du fait qu'ils adoptent différentes approches d'enseignement et d'évaluation par rapport à celles apprises dans leur programme. D'autres résultats inclus : manque de capacité à l'auto-évaluation des connaissances de l'évaluation – les futurs enseignants nécessitaient de soutien et de structures à travers de questions guidées afin de réaliser et d'articuler ce qu'ils savent (ses connaissances acquis pendant leur programme de formation); et, développement de leurs capacités et compétences à travers des réflexions sur ce qui est arrivé quand ils ont évalué les élèves.

Mots clés *: Évaluation formative, croyances des futurs enseignants, formation initiale.*

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INTRODUCTION

In the last half century, many reforms in education based on constructivist approaches to teaching and learning in countries around the world such as Canada, the United Kingdom and the United States, have led to revisions in teacher education programmes in order to improve the quality of their programmes and to provide pre-service teachers with the most appropriate preparation (Bullock, 2011; Cochran-Smith, 2003; Darling-Hammond, 2006; Kosnik & Beck, 2009). More specifically, these reforms have included changes in the way teachers are expected to teach and assess, and, within this new reality, teachers are now required to be diagnosticians and planners, possessing a great deal of knowledge of the learning process, as well as be equipped with different teaching tools, in order to ensure successful learning for their students (Darling-Hammond, 2006).

In terms of the assessment process, research indicates that teachers should not only assess their students' learning by using different assessment tools but also keep track of student progress through formative assessment practices such as portfolios, peer/self- assessments and observations (DeLuca & Klinger, 2010). Although many authors mention that formative assessment can have positive impacts on educational outcomes (Black & Wiliam, 1998; Lee & Coniam, 2013; Popham, 2000; Stiggins, 2002), these authors also claim that formative assessment cannot be implemented successfully in existing learning programmes in schools (such as the Quebec education programme) without a radical redefinition of the roles and responsibilities assigned to teachers and learners in learning and assessment. In order to fulfill such needs, teacher education programmes have increased practicum hours and have created formal evaluation courses and added more teaching methods courses. However, as shown in this study, simply providing teachers with more courses or practicum hours is not necessarily the best solution for ensuring that novice teachers are well-prepared for the challenges of implementing an assessment for learning approach.

Moreover, studies have shown that as pre-service teachers begin their teacher education programmes, they bring with them a series of general conceptions[1] on teaching and learning that can work as filters, thereby blocking out programme experiences that are cognitively incompatible with their prior beliefs (Calderhead, 1996; Freeman & Johnson, 1998; Holt-Reynolds, 1992; Wideen, Mayer-Smith & Moon, 1998). In relation to pre-service teachers' assessment preparation (often referred to as their assessment literacy), as Dixon, Hawe and Parr (2011) state, in order to

[1] In chapter 2, section 1.3., we will define and explain how the term conceptions was used in this study.

truly promote students' learning, teachers (and pre-service teachers) must receive detailed preparation and guidance including clear examples of how to assess their pupils using traditional/summative and formative practices. According to the authors, that is mainly due to the influence of teachers' beliefs on how teachers interpret the roles they and their students play in assessment practices. Therefore, for many years, many researchers have recommended that teacher educators take pre-service teachers' beliefs into consideration while preparing and teaching their courses in order to provide pre-service teachers with meaningful preparation (Borg, 2003; Hollingsworth, 1989).

In terms of providing pre-service teachers with opportunities to develop their abilities to teach and assess learning, research has shown the importance of increasing pre-service teachers' practicum hours (Beck & Kosnik, 2000; Margolis, 2007; Turnbull, 2005), and the importance of formal evaluation courses as efficient elements in developing these abilities (Allen & Flippo, 2002; DeLuca & Klinger, 2010; Graham, 2005). Based on the fact that many teacher education programmes in North America are only one year long, Quebec teacher education programmes would seem adequate due to the number of opportunities pre-service teachers have to develop their assessment skills because they are offered opportunities to put their knowledge into practice repeatedly throughout four years. Although the BEALS[2] teacher education programme provides a four-year teacher preparation including 900 hours of practicum, a formal evaluation course, and five teaching methods classes that also include assessment, we have noticed through the analysis of our students' assignments, discussions with associate teachers, university supervisors and other teacher educators for the last five years, that pre-service English as a second language (ESL) teachers from the *Université de Sherbrooke* still graduate relying on their own beliefs about assessment to assess pupils, possibly without an awareness of how these beliefs could impact their practices. This study will investigate what beliefs related to formative assessment pre-service ESL teachers at one Quebec university have and their impacts on process of learning to teach. It will also determine which elements are missing in their preparation that would allow teacher educators to improve their teacher education programmes.

The main issue here is that without knowing how to assess their pupils with the right and necessary tools, pre-service ESL teachers will rely on traditional assessment (such as tests) that

[2] BEALS stands for *Baccalauréat d'enseignement d'anglais langue seconde* which means Bachelor in teaching English as a second language.

are not consistently the most effective way to assess their students' learning. In addition, without proper preparation and understanding their own beliefs, pre-service ESL teachers could also end up basing their assessment practices on prior beliefs and assumptions that do not necessarily match the requirements of the context they will teach in, which could frustrate their pupils and themselves. For example, in Quebec's current educational system, pre-service ESL teachers are required to assess their students' oral interaction competency (Gouvernement du Québec, 2001b). However, one of the tools most commonly used to assess this competency by many associate teachers (and replicated by their student teachers) is the use of individual oral presentations (which do not promote interactions).

One possible reason for such phenomena could be attributed to the interaction/conflict between theories and practices pre-service teachers are exposed to during their teacher education programme with their prior experiences and beliefs. During their university coursework, pre-service teachers are expected to learn about the concepts of assessment, the requirements that they are expected to follow. Finally, pre-service teachers also learn by observing their professors use their own assessment tools and systems. While on practicum, pre-service teachers will also be in contact with their associate teachers' beliefs and practices related to formative assessment which might differ from the theories and approaches promoted by university professors. According to Tang, Lee and Chun (2012), exploring and understanding pre-service teachers' practices on their practica is probably the best way of knowing more about how pre-service teachers' beliefs and knowledge develop. For that reason, this study will focus on pre-service ESL teachers' fourth year of teacher education, the year in which they have their longest teaching practicum.

In the first chapter, we will discuss how pre-service teachers learn about practices related to formative assessment in their teacher education programmes, more specifically throughout the last year of one ESL teacher education programme in Quebec. In order to understand this context we will briefly outline teacher education up until the 1980's, and then go on to discuss in greater detail how pre-service teachers are prepared in current programmes, focusing on one programme at the Université de Sherbrooke, where this study took place. Moreover, we will examine in particular detail the process by which ESL teachers learn to evaluate formatively throughout their four years in the programme at the Université de Sherbrooke. Finally, the research question and sub-questions will be presented, along with a discussion of how this study will lead to some responses to these questions.

In the second chapter, we will build the conceptual framework by discussing theoretical models in three main areas: (a) professional development for pre-service teachers; (b) the role of beliefs in teacher education; and (c) assessment literacy. These models are included because they form the basis for the data collection methods that will be used. For instance, in the section that explores professional development, we have chosen to include two models, one developed by Altet (2008) and the other by Vanhulle (2009a) because they provide an overview of how pre-service teachers acquire knowledge. In the following section, we will discuss in more detail the role of teachers' beliefs in shaping their learning-to-teach process. In the assessment literacy section, we will discuss the importance of providing pre-service teachers with adequate preparation to perform assessment tasks. In the same section, we will discuss two models (Cowie & Bell 1999; James & Pedder, 2006) that will be used to identify pre-service teachers' beliefs and practices about assessment. Finally, the chapter will conclude with a presentation of the research objectives.

In the third chapter, we will discuss the research methodology by presenting this study's participants and a review of how the chosen data collection tools have been used by other researchers to identify teachers' beliefs and how the collected data was analyzed.

In the fourth chapter, we will present our results found through our data collection. In the first part of the chapter, we will present our findings based on the analysis of our participants' initial questionnaire and their first semi-structured interview. In the second part of the chapter, we will present our findings obtained through the analysis of our participants' narratives and stimulated recall sessions, which were collected during the practicum. In the third and final section of chapter four, we will identify our participants' beliefs and practices related to formative assessment identified at the end of their teacher education programme according to the analysis of our second questionnaire and final semi-structured interview.

In the fifth chapter, through the lens of Altet's (2008) professional development paradigms and approach to practicum and Vanhulle's (2009a) professional development model, we will respond to our research question by discussing how our participants' formative assessment beliefs and practices related to formative assessment evolved. In the second part of the chapter, we will examine the main elements that we have identified that influenced the evolution of our participants' beliefs and stated practices.

CHAPTER 1 – RESEARCH CONTEXT AND PROBLEM

1. TEACHER EDUCATION PROGRAMMES

Among the challenges faced by pre-service teachers in their teacher education programmes, Darling-Hammond (2006) mentions three main ones that significantly complicate their learning-to-teach process. Firstly, pre-service teachers need to consider teaching from a different perspective than the one they have held for many years. That is, they are no longer students in the classroom. Secondly, pre-service teachers must not only learn to think like teachers but also to act like teachers. And finally, they must understand and learn to meet institutional goals, education policies and regulations. For the sake of helping pre-service teachers overcome these challenges and improve their preparation, many teacher education programmes have adapted and changed several elements based on empirical research and on ministerial requirements. However, despite these changes and improvements, several researchers contend that initial teacher education still has little influence on pre-service teachers' classroom practices (Bullock, 2011; Cochran-Smith, 2003; Kosnik & Beck, 2009).

In order to explain our research problem and context, this chapter is divided into three main sections. In the first section, we present an overview of how teacher education programmes have evolved by focusing on the main elements that influence pre-service teachers' learning-to-teach process. In the second section, we will focus on how pre-service teachers learn to assess in their teacher education programmes through formal evaluation courses and teaching methods courses. In the same section, we will also discuss the importance of preparing pre-service teachers to formatively assess their pupils, as well as the impacts of their beliefs on their teaching tasks. In the third section, we will first of all present an overview of the current Quebec education system and how it has evolved since its initial implementation, by mainly focusing on how teachers (and pre-service teachers) are expected to assess their pupils' learning. Secondly, we will present how pre-service ESL teachers learn to teach and assess at the Université de Sherbrooke by describing the university's formal evaluation and teaching methods courses and its field experiences (practica). Finally, we will present our research question and sub-questions.

1.1 Teacher Education Programmes before the mid-1980s[3]

Until the mid-1980s, one of the main problems of teacher education programmes was the fact that it focused on providing pre-service teachers with knowledge about teaching instead of on how the pre-service teachers could actually develop their competencies to teach (Carter, 1990; Wideen et al., 1998). Under this *traditional* approach, many teacher education programmes in North America consisted of an assortment of isolated courses coupled with field experiences in which pre-service teachers were expected to make connections between the theories learned in those courses with their practices (Britzman, 2003; Johnson, 2009; Korthagen, 2001; Russell, 1988). As a consequence, as Zeichner and Tabachnick (1981) point out, following this traditional teacher education approach, the knowledge taught in their courses ended up being "washed out by school experience" (p. 7). In other words, when pre-service teachers were faced with a school milieu that prevented them from applying the knowledge they learned in their university coursework, they would tend to neglect the knowledge acquired in their coursework and favour what they learned in the classroom. Thus, one of the main criticisms levelled at teacher education programmes has to do with this gap between theory and practice (Dillon & O'Connor, 2011; Falkenberg, 2010; Smits, 2010).

1.1.1 Linking theory and practice.

Although much has been studied about bridging pre-service teachers' gap between theories acquired in their university coursework and their practica (field experiences), Freeman and Johnson (1998) assert that numerous language teacher education programmes still operate under the conception that pre-service ESL teachers must firstly be provided with knowledge about language learning and language teaching; secondly, be exposed to a variety of practices and methodologies; and thirdly, be given field experiences in which they are expected to autonomously apply the theories they have learned in classroom settings. Thus, if pre-service teachers are not able to make links between these newly acquired theories on practice while on their field

[3] The authors and researchers that appear on sections 1.1 and 1.2 have either written articles or conducted empirical studies that reviewed how teacher education programmes were operated at a certain period of time or were used to shape and influence these same programmes.

experiences, a gap is created. According to Dillon and O'Connor (2011), this gap comes from the fact that:

> [T]he guidelines for teaching offered in teacher education courses seem abstract to students, even if couched in applied ways, and thus difficult to integrate well in students' learning since students have limited teaching experience upon which to interpret and integrate the guidelines. In addition, when students are immersed in the "practice" of student teaching, they often feel that the guidelines offered in their program (those few that they may be able to remember!) are insufficient in the face of the enormous complexity of the classroom. (p. 118)

Another possible reason for this gap lies in the lack of support teacher educators receive in terms of integrating theory and practice in their professional learning as teacher educators (Korthagen, 2001; Russell & Korthagen, 1995; Wilson, 1990). By not being aware of the reality pre-service teachers face while on practicum, some teacher educators could end up teaching theories that are not adequate or realistic for the classroom context, which would give pre-service teachers the impression that their teacher education programmes failed to prepare them to become teachers.

1.2 Teacher Education Programmes after the mid-1980s

After educational reform movements that began in the 1980s, teacher education programmes focused on how to bridge the gap between the theories advocated in their programmes and pre-service teachers' practices (Cochran-Smith, 2005; Korthagen & Kessels, 1999). More specific to second language teaching programmes, with the appearance of the communicative approach to language teaching in the 1980s, other significant changes and improvements were made to the way pre-service teachers learned how to teach and assess within second language teacher education programmes. In other words, since with communicative approach, language learning no longer focuses just on memorizing words and verbs but rather on communication; teachers are now required to learn and develop new teaching and assessment methods that promote this new approach.

1.2.1 A communicative approach to language teaching.

Based on the communicative competence model developed by Hymes (1972), the communicative approach, which is the approach currently promoted in Quebec ESL programmes, focuses on learner-centred instruction that promotes pedagogical task-based activities emphasizing function instead of form (Brown, 2000; Fleming, Bangou & Fellus, 2011; Howatt & Widdowson, 2004). In addition, the focus of communicative competence in second language education is:

> … on how learning the L2 [second language] is not just a matter of learning grammatical structures, but also the ability to master the rules of use for the target language in social contexts in reference to a normative or native-like standard. In this approach, the communicative function of language holds a place as important as that of structure. (Fleming et al., 2011, p. 41)

For instance, within this approach, pre-service ESL teachers are expected to learn in their teacher education programmes how to teach a second language by using different student-centred and project-based activities that promote communication in diverse contexts. However, leveraging this communicative profile requires an appropriate model for second language teacher education. In other words, pre-service teachers must be provided with explicit examples of how to implement the communicative approach in their classroom settings; otherwise, they could end up teaching using traditional activities (teacher-centered) that do not necessarily promote communication or culture, such as drills, dictations and fill-in-the blanks exercises.

However, providing teachers with adequate preparation is not only dependent upon providing them with explicit examples of how to teach. Therefore, after the mid-1980's, researchers began to promote the idea of acknowledging pre-service teachers themselves as being a central element in understanding and improving English language teacher education (Crandall, 2000; Darling-Hammond, 2006; Freeman & Johnson, 1998).

1.2.2 Pre-service teachers' new roles

According to Freeman and Johnson (1998) and Daly (2009), owing to changes in the conceptions of how language teachers learn to teach, teacher educators have come to recognize that pre-service teachers are not "empty vessels waiting to be filled with theoretical and pedagogical skills; they are individuals who enter teacher education programmes with prior experiences, personal values, and beliefs that inform their knowledge about teaching and shape what they do in their classroom" (Freeman & Johnson, 1998, p. 401). Thus, in order to strengthen and improve educational practices, teacher educators must acknowledge the importance of prior knowledge as a powerful factor in the learning-to-teach process and as an element that will shape the teacher's knowledge base.

According to Fleming et al. (2011), a teacher's knowledge base is defined as the "result of the tensions between prior beliefs, the knowledge acquired through reflective practice, and the institutional contexts in which one works" (p. 43). Therefore, among the elements that several researchers acknowledge as being responsible for shaping pre-service ESL teachers' learning-to-teach process, the main ones are: pre-service teachers' prior beliefs; their field experiences; and learning through reflection.

1.2.3 Pre-service teachers' prior beliefs

One of the most important elements that shapes pre-service ESL teachers' learning-to-teach and professional development in their teacher education programmes is their prior beliefs. As previously mentioned, as pre-service teachers begin their teacher education programmes, they bring with themselves beliefs about the teaching and learning process that could filter or block programme experiences that differ from these beliefs (Borg, 2011; Buehl & Beck, 2015; Calderhead, 1996; Freeman & Johnson, 1998; Wideen, et al., 1998). Furthermore, these beliefs seem to be developed during what Lortie (1975) called the apprenticeship of observation, which refers to the knowledge built through the many years pre-service teachers spend as students at school, by observing their own teachers. For example, some of these prior beliefs can be notions of how to be an effective teacher (Calderhead, 1988; Pajares, 1992; Smith & Strahan, 1997), and,

regarding the assessment process, how they should assess and correct their pupils based on the related techniques they were exposed to as students and/or their own preferences.

According to Borg (2003) and Hollingsworth (1989), acknowledging pre-service teachers' prior beliefs is essential in terms of providing pre-service teachers with a meaningful teacher education programme. For instance, Pu (2012) conducted a study to investigate how pre-service ESL teachers think, know and believe when it comes to teaching English learners. Among his findings, Pu (2012) was indeed able to identify pre-service ESL teachers' "knowledge and disposition development and transformative actions towards teaching English learners, as well as existing gaps (e.g. misinterpretations of the use of home language) in their understandings" (p. 12). In addition, Pu (2012) concluded that studying pre-service teachers' perceptions of teaching helps teacher educators answer questions such as: "what knowledge, skills, and disposition have preservice teachers developed towards teaching Els [English language learners]? What are the existing misunderstandings/incomplete understandings? How can teacher educators modify the course to fill the gap?" (p. 15). In other words, when planning and teaching their classes, teacher educators should take into account pre-service teachers' prior beliefs and, for instance, discuss possible impacts of these beliefs on pre-service teachers' practices. Otherwise, if pre-service teachers' beliefs are not challenged, pre-service teachers could rely on their previous experiences of teaching and learning languages and this new knowledge could end up being ignored (Henrichsen, 2010; Tillema, 1998; Vanderwoude, 2012) or "washed out" by field experiences (Zeichner & Tabachnick, 1981).

1.2.4 Field experiences

After the mid-1980's, in order to improve the quality of their teacher education programmes and to try to bridge the gap between theory and practice, many teacher education programmes increased the amount of the field experience offered to their pre-service teachers (Goodman, 1985; Huling, 1998). According to many authors, pre-service teachers' field experience is one of the most relevant elements that shapes pre-service teachers' learning-to-teach process and their professional development (Britzman, 2003; Le Cornu, 2009; Margolis, 2007; Tang, 2003; Turnbull, 2005; Walkington, 2005). In many teacher education programmes, these

opportunities take the form of practica[4]. During these field experiences, pre-service teachers are expected to be able to test the theories and methods they have learned during their courses and to reflect on their practices in a real classroom context. In addition, according to Bullock (2011), pre-service teachers tend to place higher importance on their field experiences than on their course work. However, simply providing pre-service teachers with these experiences does not guarantee the quality of teacher education programmes, and supervising them should not be reduced to a mere checklist of desired behaviors (Nolan & Hoover, 2004). Therefore, as other authors point out, among other elements, there are two actors that have an important role on how pre-service teachers learn to teach while on practicum: their associate teacher and their university supervisor (Beck & Kosnik, 2000; Tang, 2003; Zeichner, 1996).

1.2.4.1 The associate teacher.

Associate teacher, also known as cooperating teacher or mentor teacher**,** is the term attributed to teachers who accept to have student teachers in their classrooms (Beck & Kosnik, 2000). According to many researchers, the support associate teachers provide can have either positive or negative impacts on pre-service ESL teachers' learning-to-teach process (Beck & Kosnik, 2000; Clarke, Triggs & Nielsen, 2014; Hollingsworth, 1989; Zeichner, 2005). For instance, if unaware of their responsibilities, associate teachers might believe that their role is only to focus on transmitting techniques and tips associated with what they believe to be effective practices (Zeichner, 2005). Furthermore, while on practicum, pre-service teachers also tend to mirror their associate teachers' practices when they are not sure how to teach and evaluate, or to default to their associate teachers' expectations. However, as other authors state, some associate teachers do provide adequate support by encouraging pre-service teachers to question their practices and to develop alternative ones (Beck & Kosnik, 2000) by giving them the freedom to try out some of their own ideas (Hollingsworth, 1989), and by promoting team teaching between pre-service teachers (Feiman-Nemser & Beasley, 1997).

[4] Other examples of field experiences include assisting teachers, administering assessments, tutoring individual students, or teaching in small and large group settings.

1.2.4.2 The university supervisor

While on practicum, pre-service teachers also receive the support of a university staff member: the supervisor. Ideally, this support would consist of helping pre-service teachers to reflect on and come up with solutions to their problems on their own, to identify how their beliefs influence their practices, and to become aware of how their associate teachers' beliefs and practices are influencing their own. Furthermore, Turunen and Tuovila (2012) state that practicum supervisors should also help pre-service teachers make links between the theories taught in their university coursework and their practices.

However, similar to what happens with associate teachers, many university supervisors may be unsure of how they should approach pre-service teachers to provide the best teacher preparation (Le Cornu, 2009; Zeichner, 1996). In fact, in many programmes, university supervisors tend to be temporary staff (such as retired teachers, and graduate students) who might have little connection to or knowledge about the rest of the teacher education programme (Zeichner, 1996). For instance, Kissau and Algozzine (2013) found in their research that practicum supervisors who were unaware of the content taught in L2 methodology courses, besides struggling to recommend new teaching strategies, were unable to determine whether their student teachers applied what they had learned. As a consequence, without adequate support and a clear awareness of their own role, university supervisors could end up inhibiting pre-service teachers from making connections between the theory learned in their teacher education programmes and their classroom contexts, and ultimately, compromise pre-service teachers' professional development (Graham, 1997, 2005; Koerner, Rust & Baumgartner, 2002; LaBoskey & Richert, 2002; Zeichner, 2002). In contrast, as Russell (2017) states, practicum supervisors who want to improve the quality of learning in the practicum "may wish to focus their attention on an epistemology of practice and promoting learning from experience during their interactions with those whom they supervise" (p. 194). In other words, practicum supervisors should make links between the theory pre-service teachers learned in their on-campus courses with the practicum experiences. Therefore, it is important for teacher educators to better support university supervisors in terms of determining their own role so that they can provide the most adequate support while pre-service teachers are on practicum.

1.2.4.3 Beliefs and practices

While the literature acknowledges that beliefs act as a filter when it comes to the learning-to-teach process (Hollinsworth, 1989; Pajares, 1992), many authors also recommend studying the relationship between teachers' beliefs and actions (practices) as they might not necessarily support each other (Basturkmen, 2012; Pajares, 1992). Accordingly, Basturkmen (2012) suggests that the relationship between teachers' beliefs and actions should be interactive, given that "beliefs drive actions but experiences and reflection on actions can lead to changes in or additions to beliefs themselves" (p. 283). In other words, pre-service teachers' beliefs are likely to change/evolve through teaching experiences and reflections. For instance, in Barahona's (2014) study, the author concluded that pre-service ESL teachers' beliefs were

> … shaped and reshaped as they engaged in the activity of learning to teach English: from their previous experiences as language learners, their experiences as learners at university, and then engaging in actual teaching. Pre-service teachers use their beliefs about teaching and language teaching to direct their actions, which in the end they developed into concepts about language teaching and learning. (p. 120)

In another study, Nias, Southworth and Campbell (1992) investigated how teachers' beliefs and practices evolved over time. These authors found that some of the possible ways included meetings and small group activities promoting discussion between the participants, as they:

> … could enhance individuals' professional learning, develop their sense of interdependence and likemindedness and help to ensure that they understood or accepted the framework of belief and action within which everyone worked. Such events also provided opportunities for the exchange of perspectives, knowledge and skills, thus ensuring that individuals learnt more about one another's practice. They gave them a chance to discover or reaffirm, through laughter and mutual support, that they liked one another or valued one another's contributions to the whole and so provided a secure context for challenge, debate and mutual critique. (Nias et al., 1992, p. 166)

Therefore, providing pre-service teachers with opportunities to reflect on their practices, teacher educators are more likely to help pre-service teachers become aware of the impacts of their own beliefs on their practices. This is important because if their beliefs are not challenged, pre-service teachers could end up simply reproducing their associate teachers' practices or basing their practice on their own prior experiences as pupils, without knowing or questioning which elements they may still need to improve in terms of their professional development. For that reason, another essential element that needs to be studied is how reflection is promoted in pre-service teachers' teacher education programmes.

1.2.5 Learning through reflection

Another important element that also began to be considered in teacher education programmes after the mid-1980's was learning to teach by becoming a reflective practitioner (Calderhead, 1988; Korthagen & Vasalos, 2005; Schön, 1983, 1987; Wallace, 1996). According to Korthagen and Wubbels (2001), pre-service teachers learn to teach in teacher education programmes based on their acquisition of knowledge, attitudes and skills through their observation of and participation in teaching situations, and based on systematic reflection on these situations with the support of associate teachers and practicum supervisors. Ward and McCotter (2004) classify pre-service teachers' reflections into four levels: routine, technical, dialogic and critical/transformational. With the first level, pre-service teachers tend not to focus on problems or make changes in their practices apart from blaming problems on others or on a lack of time or resources. In terms of the technical level, pre-service teachers would use reflections to solve a problem without questioning its nature. In the third level (dialogic), pre-service teachers would focus on others' perspectives and on the learning process in the long term. Finally, in the critical/transformational level, which is a level rarely reached by pre-service teachers when reflecting on their own teaching, pre-service teachers question fundamental assumptions and purpose in more in depth. According to Hagevik, Aydeniz, and Rowell (2012), pre-service teachers' reflections are usually limited to the first levels. However, the authors did find in their study that pre-service teachers were able to reach the higher levels of reflection by being involved in research, such as doing action research. Furthermore, by promoting reflection, teacher education programmes enable pre-service teachers to analyze, discuss, evaluate and change their own

practices; encourage them to take greater ownership of their own professional growth and professional autonomy; and help them develop their own theories of educational practice, by understanding and developing a principled basis for their own classroom work (Calderhead & Gates, 1993). However, if pre-service teachers are not offered opportunities to reflect on their beliefs and the impact of those beliefs on their practices, they will not be able to make links between the theories taught in their university coursework and their practices, which could lead to knowledge taught in their courses being washed out by school experience and mismatch between beliefs and practices, as previously mentioned.

Among the changes that were made in many teacher education programmes after the education reforms throughout the previous decades, some focused on the way teachers and pre-service teachers are expected to assess their pupils' learning (Darling-Hammond, 2006). As a consequence, teacher educators were expected to make changes in order to match such demands (Black & Wiliam, 1998; DeLuca & Klinger, 2010). Therefore, in the next section, we will discuss how pre-service teachers are prepared to perform such assessment tasks.

2. THE ASSESSMENT PROCESS IN TEACHER EDUCATION PROGRAMMES

Today's teachers (and pre-service teachers) are expected not only to assess their pupils' learning by using different assessment instruments but also to use these instruments to support their teaching and measure their pupils' development (DeLuca & Klinger, 2010). In addition, good classroom assessment allows teachers to gather precise information about students' achievements, provide feedback to students and parents, and regulate further instruction, while ineffective assessment could compromise students' learning (DeLuca & Klinger, 2010). In order to understand the importance of providing pre-service teachers with adequate assessment preparation, we must define an important term found in the literature: *assessment literacy*.

2.1 Assessment Literacy

Assessment literacy is the term used to describe "the possession of knowledge about the basic principles of sound assessment practice, including terminology, the development and use of

assessment methodologies and techniques, familiarity with standards of quality in assessment...and familiarity with alternatives to traditional measurements of learning" (Paterno, 2001, p. 3). Another definition is provided by Stiggins (1995), who states that assessment-literate individuals are people who know "the difference between sound and unsound assessments … [and are] not intimidated by the sometimes mysterious and always daunting technical world of assessment" (p. 240). In addition, someone who is assessment literate is able to understand which assessment methods to use to gather dependable information on student achievement and communicate assessment results effectively, whether using report card grades, test scores, portfolios, or face-to-face discussion. Before describing how pre-service ESL teachers are prepared to evaluate and assess students' learning in their teacher education programmes, it is important to define two important terms for understanding our study: evaluation and assessment.

2.1.1 Evaluation

According to evaluation experts, the term *evaluation* can be defined as a complex process that is usually individual and personal, and that involves determining the value of an object (or person) at a given moment (Laurier et al., 2005). In addition, Worthen, Sanders and Fitzpatrick (1997) state that:

> … evaluation uses inquiry and judgement methods, including (1) determining methods standards for judging quality and deciding whether those standards should be relative or absolute, (2) collecting relevant information, and (3) applying the standards to determine value, quality, effectiveness, or significance. It leads to recommendations intended to optimize the evaluation object in relation to its intended purpose(s). (p. 5)

More specific to the classroom context, the evaluation process is characterized by a person (teacher) who has to judge the extent or quality of the learning acquired by a pupil, particularly when making a decision about this individual (Laurier et al., 2005). In addition, Crooks (1988) states that evaluation is carried out through activities (such as formal teacher-made tests, oral questions asked of students, and curriculum-embedded tests) that students undertake as part of their educational programmes.

2.1.2 Assessment

In reference to students' learning, over the years, the term "assessment" has progressively replaced "evaluation" (Allal & Mottier Lopez, 2005; Scallon, 2004). According to different authors, the etymology of the word "assessment" can be traced back to the Latin assidere, meaning "to sit by", and within a classroom context, this would be in terms of being sure that the student's answer really means what it appears to (Scallon, 2004; Wiggins, 1989). Among the different definitions found in the literature, assessment can be defined as:

> … the process of gathering and discussing information from multiple and diverse sources in order to develop a deep understanding of what students know, understand and can do with their knowledge as a result of their educational experiences; the process culminates when assessment results are used to improve subsequent learning. (Huba & Freed, 2000, p. 8)

Therefore, one of the key elements that pre-service teachers should learn during their teacher education programmes is not just how to assess in the traditional summative (assessment of learning) sense of issuing a mark, but how to assess in a genuinely formative way (assessment for learning). This brings us to the issue of formative assessment.

2.2 Formative Assessment

Before discussing the importance of formative assessment in today's education systems across the world in terms of assessing students' learning, it is important to define and characterize the term. According to Black, Harrison, Lee, Marshall and Wiliam (2004), formative assessment can be defined as:

> [A]ny assessment for which the first priority in its design and practice is to serve the purpose of promoting pupils' learning. It thus differs from assessment designed primarily to serve the purposes of accountability, or of ranking, or of certifying competence. An assessment activity can help learning if it provides information to be used as feedback,

> by teachers and by their pupils in assessing themselves and each other, to modify the teaching and learning activities in which they are engaged. Such assessment becomes ‘‘formative assessment’’ when the evidence is actually used to adapt the teaching work to meet learning needs. (p. 2)

Among the possibilities of classroom practices that promote formative assessment, Allal and Mottier Lopez (2005) mention direct teacher observation, exchanges among students (reciprocal assessment) at various points during an activity, and class discussions (p. 5). In this type of assessment, students' errors are considered as integral parts of the learning process, not as a sign of weakness (Durand & Chouinard, 2006). According to Mavrommatis (1997), classroom assessment consists of "all the processes used by teachers for collecting information and for making interpretations and decisions based on this information on a daily basis in the classroom in order to improve teaching and learning" (p. 381). However, as Mavrommatis (1997) states, all teachers do not share this definition. To some, classroom assessment is the "summative mark that is used as the basis of school records", while to others, it is "the diagnostic and formative impact of assessment on children's learning", or finally "the checking of children's daily work" (Mavrommatis, 1997, p. 382). Despite the term's different definitions, as Mavrommatis (1997) points out, research shows that in practice, teachers either follow their intuition when it comes to classroom assessment or are not aware that classroom assessment is happening in the class. Moreover, Mavrommatis (1997) concludes that the main problem behind implementing structured assessment techniques can be traced to inadequate assessment training.

Since teachers are now expected to make use of different teaching and assessment tools that ensure successful learning for their pupils (Darling-Hammond, 2006; DeLuca & Klinger, 2010), by researching pre-service ESL teachers' beliefs and practices related to formative assessment we will also be able to see how these pre-service teachers were prepared to assess and will be able to identify the strengths and weaknesses of their programme. Thus, in order to develop pre-service teachers' assessment literacy, some teacher education programmes provide pre-service teachers with formal evaluation courses and teaching methods courses.

2.3 Teaching Methods Courses

In teacher education programmes, pre-service ESL teachers also learn to assess in their teaching methods courses. The apparent advantages of teaching methods courses include giving pre-service teachers new ways of thinking about teaching and learning, hence pedagogically developing their ways of acting as and being teachers (Ball, 1992), enabling pre-service teachers to change their perception of practices (Grossman, Valencia & Hamel, 1997), and promoting change in pre-service teachers' beliefs and practices (Agee, 1997; Clift & Brady, 2005; Graham, 1997; 2005; Wolf, Hill & Ballentine, 1999). In these courses, pre-service ESL teachers are expected to learn to assess by making connections between planning, teaching and assessing pupils. If pre-service teachers are able to learn how to make such connections, teaching methods courses will indeed help pre-service teachers learn to evaluate.

However, teaching methods courses might also have a negative impact on pre-service ESL teachers' learning-to-teach process. If pre-service teachers consider their methods courses as an end in themselves, the complexity of the pedagogical activities studied in these courses can boil down to mere technical solutions for implementing classroom practices (Britzman, 2003). In other words, if these courses are seen only as sources of teaching tools and techniques, both pre-service teachers' prior knowledge and beliefs will be repressed and teaching methods courses will only serve to help pre-service teachers go through the lessons they must teach. Therefore, despite the fact that teaching methods courses might help pre-service teachers learn to teach and evaluate, their presence in second language teacher education programmes does not guarantee effective teacher preparation. It is also important to consider how these courses integrate pre-service teachers' prior beliefs into the content being taught.

2.4 Formal Evaluation Courses

Despite the fact that teacher education programmes increased their requirements for developing assessment literacy, many authors point out that only a few institutions throughout North America have formalized assessment education courses (DeLuca & Klinger, 2010; Stiggins, 2004; Volante & Fazio, 2011;). According to DeLuca et al. (2013), formal assessment courses are

extremely relevant as they complement field-based teaching experience and help pre-service teachers develop their assessment literacy. However, as Mertler (2003) states, in order to be genuinely valuable, these courses must take into consideration the reality of classrooms and assessment practices should be seen as an integral part of the teaching process. Thus, the fact that an institution offers a formal assessment course does not guarantee that pre-service teachers will truly develop their assessment literacy. According to Fazio and Volante (2007), faculties of education should conduct a systematic gap analysis of their pre-service teachers in order to identify possible disconnections between the intended assessment curriculum and what pre-service teachers actually learn. If content taught in formal evaluation courses does not match the reality witnessed by teachers (and pre-service teachers), the knowledge learned from practice comes into competition with the knowledge learned in university courses and student teachers are faced with the dilemma of making a choice. However, it is important to mention here that sometimes this choice is a non-choice, as many pre-service teachers believe that they must automatically follow their associate teachers' instructions in order to succeed in the practicum.

2.5 Beliefs and Practices about Assessment and Formative Assessment

In the same way that teachers' practices are influenced by their beliefs, Bliem and Davinroy (1997) suggest that teachers' evaluative practices are affected by their beliefs. To illustrate this relation, Sikka, Nath and Cohen (2007) conducted an exploratory study aimed at investigating the beliefs and assessment practices of four secondary teachers. Among their results, the researchers found that despite the fact that all participants had extensive assessment knowledge and used different types of assessment approaches, all of them also claimed that they needed to improve their learning probably due to their lack of practice (Sikka et al., 2007). In addition, these researchers also found mismatches between the participants' beliefs and their assessment practices, which could lead to severe consequences. For instance, as these authors state, if teachers believe that multiple choice tests are not relevant in terms of instructional decision-making, but still implement them in their classrooms, they could end up suffering from low self-esteem, which can lead to burnout. Thus, if teachers (and pre-service teachers) are not aware of how to use different assessment instruments in their class, they could end up relying on traditional assessment tools that do not match their beliefs. Therefore, when preparing teachers to assess their pupils' learning,

teacher educators, associate teachers and university supervisors should not only give examples of how to use different types of assessment in the classroom, but also challenge pre-service teachers' beliefs and practices. By having their beliefs and practices identified, pre-service teachers will be aware of their own beliefs and the consequences these beliefs could have on their practices, and finally, they will be able to identify possible gaps in their professional development.

In relation to formative assessment practices, although teachers have been required to use formative assessment, studies seem to show that teachers have not been adequately prepared to consciously implement such practices. For instance, in a study conducted in Quebec, Thomas, Deaudelin, Desjardins and Dezutter (2011) investigated the formative evaluation practices of 13 experienced elementary school teachers. Among their findings, Thomas et al. (2011) found that the participants were using formative evaluation practices in their classrooms informally and spontaneously, but that they were not necessarily clear about why they were doing this. The researchers concluded that there is a need for professional development on formative evaluation practices, given that some of their participants were not able to "articulate their understanding of a procedure or problem and the necessary learning processes to carry out the procedure or solve the problem" (Thomas et al., 2011, p. 394). For this reason, we believe that more studies are necessary to investigate how both practicing teachers and pre-service teachers understand the reasons and procedures for using formative assessment to support student learning.

Although the literature on formative assessment acknowledges the benefits of formative assessment for student outcomes and attitudes, there is a lack of studies conducted on the influence of teacher's beliefs on their formative assessment practices (Brookhart, Moss, & Long, 2009; Carless, 2005; Shepard, 2000; Song & Koh, 2010). However, one study that does illustrate such impacts is that of Song and Koh (2010), which investigated the relationship between teachers' beliefs about student learning and their formative assessment practices. In their study, Song and Koh (2010) found that teachers' use of formal or informal summative assessment prevailed over their formative assessment practices which could be attributed to a lack of training in formative assessment practices. One of the limitations of Song and Koh's (2010) study was the fact that the authors did not actually see the participants' formative assessment practice. As previously mentioned, when it comes to investigating teachers' beliefs, the literature suggests seeing the

participants in action, as their stated beliefs and practice could differ (Pajares, 1992). However, Song and Koh's (2010) findings highlight the necessity of further studies on the level of assessment training in pre-service and in-service courses in order to investigate the impacts of such programmes on teachers' formative assessment practices.

As we can see, all the above-mentioned studies' findings corroborate the effects of beliefs as filters on newly acquired knowledge (Calderhead, 1996; Freeman & Johnson, 1998; Holt-Reynolds, 1992; Wideen, et al., 1998) and the importance of studying their impacts on assessment literacy. Thus, after having presented some of the main elements that influence how pre-service ESL teachers learn to teach and assess during their teacher education programmes, in the next section we will describe the specific context of the present study, namely the Quebec Education System and the BEALS programme.

3. THE QUEBEC EDUCATION SYSTEM

The current education system in Quebec began to be set in motion by the *Ministère de l'Éducation, Enseignement supérieur* (MEES)[5] at the end of the 1990s, when the provincial government invited citizens and educational institutions to participate in the Estates General on Education in order to take stock of the state of Quebec's education system (Gouvernement du Québec, 2001a). After examining several experts' reports, in 1997 the MEES published a document entitled *L'école, tout un program* (Gouvernement du Québec, 1997) which contained the general guidelines for the education reform that was expected to be implemented in the province in 2000, beginning at the elementary level. Thus, in 2001, the MEES published a document entitled *Program de formation de l'école québécoise* (PFÉQ) (Gouvernement du Québec, 2001a)[6], thereby adopting a competency-based approach (CBA) that focused on essential learning, as well as reorganizing education levels into cycles in order to provide better pedagogical support and better evaluation of students' learning (Gouvernement du Québec, 2001a). Thus, before describing how students' learning is evaluated and assessed under the CBA, it is necessary to explain some of its main concepts and ideas as found in the literature.

[5] It is important to mention here that before 2015, the term in use was rather MELS (which stands for *Ministère d'Éducation du Loisir et du Sport*), and prior to 2005, it was MEQ (*Ministère d'Éducation du Québec*).
[6] In 2006, a new version was also released.

3.1 The Competency-Based Approach (CBA)

According to assessment specialists, many researchers and theorists have attempted to define and explain the concept of competency, which is central to understanding Quebec's educational system (Fontaine, Savoie-Zajc & Cadieux, 2013; Laurier, Tousignant & Morissette, 2005; Scallon, 2004; Tardif, 2006). Some of the definitions of competency found in the literature, include that of Scallon (2004), who sees competency as "the capacity, a potential (unobservable) or a permanent characteristic of a person" (p. 105) and "an ability that is revealed when a person is placed in a group of problem-situations (several complex tasks with similarities)[7]" (p. 106). The MEES's guidelines also give an official definition of competencies along with some of their main features:

> The Quebec Education Program defines a competency as a set of behaviours based on the effective mobilization and use of a range of resources. Set of behaviours refers to the capacity to use appropriately a variety of resources, both internal and external, in particular, learnings acquired in school or in everyday life. One aim of a competency-based program is to ensure that students' learning serve as tools for both action and thought, which is a form of action. Unlike a skill, which may be applied in isolation, a competency makes use of several resources and is itself used in fairly complex contexts. (Gouvernement du Québec, 2001a, p. 4)

In addition, in the same guidelines we find that, within this new approach, teaching is organized in terms of competencies in order to make learning meaningful. Accordingly, besides being required to organize their teaching based on competencies, teachers also needed to base their assessment practices on competencies using various sets of official documents.

3.1.1 The Assessment process in Quebec's competency-based approach

According to the Gouvernement du Québec's (2001a) guidelines, assessment under Quebec's CBA was expected to be an integral part of the learning process and teachers were

[7] Author's translation.

expected to "guide and support students' learning and assess the development of the competencies" (p. 9). The same guidelines also mentioned tools (grids, reflection sheets and anecdotal notes) teachers could use in order to assess the development of the competencies. Since this document did not actually include examples of how teachers could use those tools or how to assess in the context of the CBA, many teachers relied on their traditional assessment tools up until the first assessment framework was published.

As one might expect in any newly implemented education system anywhere, Quebec's began to publish different guidelines with changes and updates in order to improve the teaching and learning process. Thus, in the next sub-section we will present the most important ones related to the evaluation and assessment of students' learning.

3.1.1.1 MEES supporting documents

The first supporting document intended to improve Quebec's CBA was published in 2002 and entitled *L'évaluation des apprentissages au préscolaire et au primaire* (Gouvernement du Québec, 2002a). This document had the purpose of helping education professionals with their evaluation practices by providing guidelines to support their actions. The document also includes explanations and examples of classroom-based evaluation practices, the assessment means and tools that could be used, and different ways of communicating with parents and students. However, since this document did not provide actual examples of report cards or how teachers should differentiate their pedagogical approaches, many teachers might have been left confused and not sure of how to proceed (Durand & Chouinard, 2006).

The same year, the MEES also published a document entitled *Les échelles des niveaux de compétences* (Gouvernement du Québec, 2002b) describing how the competencies were expected to be developed at the elementary level. According to Durand and Chouinard (2006), these scales were created to support teachers' pedagogical actions related to students' learning and the evaluation of their competencies. Despite the hard work that was put into developing them, these scales lacked consistency from one level to another and failed to integrate competencies into

certain subjects. Consequently, the scales were not uniformly adopted by teachers and many kept on following their own ways of teaching and evaluating pupils.

In 2003, the MEES published a document entitled *Polique d'évaluation des apprentissages* (Gouvernement du Québec, 2003). In this document, evaluation is defined as "the process whereby a judgement is made on a student's learning on the basis of information gathered, analyzed, and interpreted, for the purpose of making pedagogical and administrative decisions" (Gouvernement du Québec, 2003, p. 8). In addition, the document also states that evaluation should be seen as an integral part of the learning process and teachers should make use of both formative and summative assessment tools throughout the cycles. According to these guidelines, the main purpose of using formative assessments was to support students in their learning process and to help teachers adjust their pedagogical activities. In contrast, summative tools were to be used to determine the degree of development of students' competencies and to keep a record of this development in a progress report (Gouvernement du Québec, 2003). However, as previously stated, in order to meet these requirements, teachers and pre-service teachers need adequate preparation and support. Therefore, one of the ways of making sure pre-service ESL teachers are indeed receiving the best possible support is by investigating the impacts of their evaluation- and assessment-related beliefs on their practice.

Three years later, in 2006, the MEES published a document entitled *Program de formation de l'école québécoise (PFEQ). Enseignement secondaire, premier cycle,* to support the secondary cycle one education programme (Gouvernement du Québec, 2006a). The guidelines set out that evaluation should not be seen as an end in itself but rather as a tool to help students learn better (Gouvernement du Québec, 2006a). Also in the same year, two other documents were published concerning the evaluation process. The first consisted of a preliminary version of an evaluation framework entitled *L'Évaluation des apprentissages au secondaire: cadre de référence* (Gouvernement du Québec, 2006b). This document provided information about learning and evaluation situations, differentiated evaluation, cross-curricular competencies, grading systems, scales of competency levels, the communication of results, and evaluation planning. In addition, in this document, the grading system is defined as the method and the tools used to take stock of

the students' developed competencies and to determine their disciplinary success, based on the data collected, analyzed and interpreted (Gouvernement du Québec, 2006b).

Another document published in 2006 related to assessment was entitled *Échelles des niveaux de compétences. Enseignement secondaire première cycle* (Gouvernement du Québec, 2006c). According to these guidelines, these scales were consistent with the contents of the PFÉQ (Gouvernement du Québec, 2006c) and their main purpose was to propose benchmarks associated with the judgment of competencies at the end of the cycle (Gouvernement du Québec, 2006c). Moreover, the MEES expected high school teachers to use the scales as a tool to form their judgments on their students' competencies during this period. However, similar to the other scales published by the MEES, since these scales did not contain concrete examples of how teachers were supposed to assess, we assume that many high school teachers might have continued to base their judgment on their beliefs and previous practices. As a consequence, when they assumed the role of associate teachers, basing their assessment methods on their own beliefs, these teachers may have confused pre-service ESL teachers with regard to the ways the latter learned to assess in their teacher education programmes. As a consequence, some pre-service teachers would be prevented from trying out some of the assessment methods learned in their programme.

The following year, the MEES published the guidelines for the secondary cycle two programmes (enriched and core) (Gouvernement du Québec, 2007a). According to these guidelines, to ensure the quality of the education system, the MEES imposed compulsory standard exams (summative assessment) to be administered to all ESL students in Quebec who complete the second cycle of secondary education. Developed by the MEES, these exams have the purpose of ensuring that throughout Quebec, students have acquired and developed the knowledge and competencies associated with the requirements included in the PFÉQ (Gouvernement du Québec, 2007a). As previously mentioned, teachers must be aware of the impacts of summative assessment on students, which could be a source of unwanted anxiety and stress (Brown, Lake & Matters, 2011). Thus, in order to be efficient, teachers and pre-service teachers need adequate guidance regarding how to teach and assess in order to support their pupils' learning and not only how to teach to prepare their pupils for these exams.

Also in 2007, two major changes were made in Quebec's evaluation system. The first one was in relation to report cards. After many complaints and requests from parents, the MEES decided to reinstate numerical report cards (Gouvernement du Québec, 2007b). The related ministry document sets out that in order to fill out each report card, teachers are to consider the state of development of the assessed competencies by assigning a grade in percentage form (Gouvernement du Québec, 2007b). To do so, teachers are expected to give a numerical value to the expectations set for the end of a term when filling out the report card. The second change was related to students being able to repeat a school year as of the year the document was published.

Another set of documents published by the MEES that had an important impact on the teaching and evaluation process was the *Progression des apprentissages anglais, langue seconde* in 2009 *(*Gouvernement du Québec, 2009a) and its equivalent at the secondary level in 2010 (Gouvernement du Québec, 2010a). The purpose of these documents was to provide teachers with more information about the knowledge students were expected to acquire in the ESL programme from the beginning (elementary) to the end of their programme (secondary). In addition, teachers were encouraged to use these documents in their class planning and to determine short- and long-term pedagogical strategies and goals. Regarding evaluation and assessment processes, this new document had two main functions: to provide teachers with effective guidance and support for students' learning, and to verify the extent to which the students had acquired the expected learning. In both documents, the progression of learning is presented in the form of tables (containing examples) that organize the elements of knowledge similarly to the way they are organized in the subject-specific programmes (Gouvernement du Québec, 2009a, 2010a). Based on the fact that many of the MEES's previous documents did not contain much information about how teachers should actually teach and assess under Quebec's CBA, publishing these sets of documents significantly improved this matter. As previously mentioned, if teachers are not offered adequate support and guidance, they may continue to teach and assess based on traditional approaches that conflict with the competency-based approach favoured by the ministry of education in Quebec.

Also in 2009, the MEES published another set of competency scales for the secondary cycle two programmes to help and guide teachers in grading their students (Gouvernement du Québec, 2009b). One important element that is mentioned in these guidelines is how high school

teachers should use them. It is stated that since the descriptions of each level of competency in the scales are short, teachers should also use different assessment tools (such as rubrics, checklists, etc.) to gather more specific and comprehensive information in order to give students feedback during the learning process (Gouvernement du Québec, 2009b). Thus, although these guidelines still did not provide concrete examples of how teachers should assess, an improvement was made in terms of the importance given to the use of different assessment tools to support teachers' decisions.

In 2010, the MEES made another significant change by introducing a single report card for all levels (Gouvernement du Québec, 2010b). Previously, the grades in the report cards were expressed either in percentages or letters and they could vary in each school board. According to these new guidelines, besides being more effective by taking into consideration the evaluation of students' learning, the new report card was also expected to provide parents with essential information so that they could better monitor their children's progress. To support its implementation, the MEES provided teachers and principals with information sessions, training and explanatory documents. Thus, after having been given one year to adapt to this new report card, since July 1, 2011, teachers have been required to use it in all of Quebec's schools (Gouvernement du Québec, 2011b).

And finally, in 2011, after having set out the new orientations for the evaluation of student learning, the Ministry of Education required evaluation to be based on documents entitled *Framework for the Evaluation of Learnin*g for each level and subject (Gouvernement du Québec, 2011a). These frameworks had the main goal of providing teachers with specific guidelines in order to determine students' grades. The frameworks also included a weighting (in percentages) of each competency to be respected with the purpose of helping teachers to determine their students' competencies to be entered on the report card. Concerning the teacher's role in the evaluation process, in these documents it is stated that teachers are responsible for selecting the evaluation tools by which to assess their students' progress, and are also expected to continuously assess their students' needs and achievements. In addition, it is important to mention that these documents included additional information to help clarify each criterion to be assessed in order to make sure teachers would know exactly what they needed to assess.

3.1.1.2 An overview of the evaluation process in Quebec: the current situation.

Since the beginning of CBA in Quebec more than ten years ago, all the changes and adjustments that have been made to this system are part of the broader evolution of the evaluation and assessment process that has also been observed in other education systems around the world (Bullock, 2011; Cochran-Smith, 2003; Darling-Hammond, 2006). In addition, since its initial phase, Quebec's assessment process has improved significantly. At first, teachers did not receive concrete examples of how to assess pupils' learning under the competency approach (Durand & Chouinard, 2006). However, after the MEES published supporting documents containing precise instructions (frameworks, competency scales and evaluation policies) and various school boards offered preparation throughout Quebec, teachers probably began to understand how to assess pupils' learning.

As of 2011, in order to assess students' learning, teachers are expected to base themselves on the following documents: the PFÉQ (Gouvernement du Québec, 2001a, 2006a, 2007a), the *Progression of learning* documents (MELS, 2009a), and the ministry evaluation framework (Gouvernement du Québec, 2011a). The documents containing the scales of competency levels (Gouvernement du Québec, 2002, 2006b, 2006c, 2007b, 2009b) are no longer valid, although they can still be used for consultation.

Similar to the lack of support that was given to teachers in conjunction with the constant changes in the MEES's policy and regulations, teacher education programmes were only informed of these changes after the documents were published. As a consequence, because of the mismatch between the content taught at universities and the MEES's requirements, many student teachers continued to go into their practica unprepared to assess their pupils, which might lead to frustration with their preparation upon graduation. In the next section we will describe some of the factors that influence how pre-service ESL teachers professionally develop their knowledge with a view to evaluating and assessing their pupils' learning in Quebec, as well as the impacts of their beliefs on their practices.

3.2 The MEES Teacher Education Programme Requirements: The Twelve Professional Competencies

Since 2003, based on the MEES's requirements (Gouvernement du Québec, 2001b), pre-service ESL teachers are expected to develop a set of twelve professional competencies through a four-year programme, focusing on enhancing the teaching act and promoting greater teacher autonomy (p. 22). Moreover, divided into four categories (foundations, teaching act, social and educational contexts, and professional identity), these professional competencies should be viewed as interdependent; they are to be implemented in an interactive way, and they represent the necessary skills that a newly graduated teacher should have (Gouvernement du Québec, 2001b). Among these 12 competencies, the fifth one is devoted to the evaluation process and is defined as "to evaluate student progress in learning the subject content and mastering the related competencies" (Gouvernement du Québec, 2001b, p. 83).

3.2.1 *MEES competency five: to evaluate student progress in learning the subject content and mastering the related competencies*

According to the Gouvernement du Québec's (2001b) guidelines, evaluation should be considered a part of the learning process and should take place on a daily basis through different types of interactions (between students and teachers, students and other students, and students and situations) (Gouvernement du Québec, 2001b). In addition, through evaluations, teachers should be able to "make decisions on each student's learning path and to inform parents on the progress made towards the acquisition of the end-of-cycle competencies" (Gouvernement du Québec, 2001b, p. 85). Furthermore, teachers are expected to document all of this information through the use of tools such as diaries or logbooks, student production files, electronic portfolios, observation grids, and checklists (Gouvernement du Québec, 2001b).

One of the most important characteristics mentioned in the guidelines is that teacher education programmes should integrate not only theoretical and practical courses, but also practical experiences held in real-life classrooms (Gouvernement du Québec, 2001b). In order to achieve this goal, the Gouvernement du Québec required university programmes to increase the

amount of field work to help pre-service teachers develop their competencies during practica (Gouvernement du Québec, 2001b).

In order to better understand this study's specific context, in the next subsection, based on the elements previously mentioned (formal evaluation and teaching methods courses and field experiences), we will discuss how pre-service ESL teachers at the Université de Sherbrooke are expected to learn to assess their pupils.

4. BECOMING AN ESL TEACHER AT THE UNIVERSITÉ DE SHERBROOKE: THE BEALS PROGRAMME

In order to become an ESL teacher in Quebec, students are required to follow a four-year university programme that introduces and instills different teaching theories and practices while in class or on practicum. As part of this learning requirement, pre-service ESL teachers are expected to learn how to assess their future students as per the guidelines and instructions issued by the MEES following a communicative approach (Hymes, 1972; Gouvernment du Québec, 2001a). Thus, throughout their teacher education programmes, among the different elements that will help pre-service ESL teachers construct their knowledge on how to assess, we will examine the programme's approach; practica; and formal evaluation and teaching methods courses. We decided to focus on these elements since the programmes in Québec also went through the same changes and improvements took place in many teacher education programmes after the mid-80s. In addition, it is important to mention here that, although a similar phenomenon might be found in other universities and programmes in Québec or North America, this study only focuses on the BEALS context since it is where the main research has identified the previously mentioned issues since 2011 during the time I have been in the role of university supervisor and teacher educator.

4.1 BEALS Formal Evaluation and Teaching Methods Courses

Two elements that could have an impact on how pre-service ESL teachers learn to assess in the BEALS programme are its teaching methods and its formal evaluation courses. In the fall of their second year of studies, BEALS pre-service ESL teachers are required to take a formal

evaluation course. According to the course plan,[8] among other objectives, pre-service ESL teachers are expected to demonstrate an understanding of the principles of second language evaluation, draw up a comprehensive evaluation assessment programme for a second-language class or programme, and develop an awareness of alternative assessment instruments and an understanding of the settings where they can be implemented.

Although having a formal evaluation course in their teacher education programme would seem to be adequate in pre-service ESL teachers' preparation to assess their pupils (DeLuca, 2012; DeLuca & Klinger, 2010), based on our analysis of the syllabus, this course seems to mainly focus on how to create tools (tests, quizzes and grids) when teaching a second language, rather than on how to develop tools that will assess student's learning. In addition, based on our informal discussions with students in the BEALS programme, this course does not provide them with specific information about the evaluation approach or the policies adopted by the MEES. Nor, in their view, does it teach them about the different kinds of tests and exams that pupils in Quebec schools must pass in order to receive credit for their courses at the high school level. The historical reason for the course content and the way it is taught is that it was originally developed by a specialist in evaluation in second language contexts who was not associated with the public-school system. This professor teaches in a different faculty than Education and therefore was unaware of all of the many changes in assessment and evaluation policy of the Ministry of Education described above. The course continues to be located in another faculty and continues to focus on broader theories of assessment in second language acquisition rather than on the Quebec Educational Programme in particular. This is an example of how university politics can affect the preparation of teachers.

Finally, BEALS pre-service ESL teachers also professionally develop their assessment literacy through teaching methods courses, which are located in the Faculty of Education. Although assessment is not the main topic of these courses, in the BEALS programme, pre-service teachers have five courses[9] in which assessment is linked with other topics, such as building a

[8] For the purposes of this study, we will use the 2014 course syllabus as an example.
[9] These courses are DID 111 - Introduction to Teaching ESL; DID 211 Teaching ESL in Primary and Secondary Schools I; DID 312 - Teaching Primary Level Intensive English; DID 313 - Second Language Learning in Primary Schools; and DID 413 Teaching ESL in Different Contexts.

lesson plan, differentiating activities and assessments, and reviewing the Quebec Education Programme for ESL.

4.2 BEALS Field Experience

In the BEALS programme, pre-service ESL teachers at the Université de Sherbrooke have 900 hours of field experience divided into four practica, including a progressive introduction to teaching (one each year). While on practicum, there are two important agents who tend to shape how pre-service ESL teachers build their learning about assessment and evaluation: their associate teachers and their practicum supervisors.

As previously mentioned, when pre-service teachers are on practicum, they receive guidance from an associate teacher who is one of the people responsible for their development. According to the university's practicum guidelines,[10] associate teachers should guide and support student teachers while they carry out the different learning activities such as preparing activities and lessons, and how to reflect on their teaching. They should also give pre-service teachers constructive feedback and collaborate with the university supervisor on the evaluation of pre-service teachers' progress.

However, as we have seen, depending on the support they receive, pre-service ESL teachers might be required to adopt practices that do not match their own beliefs. For example, a pre-service ESL teacher might learn in his or her university courses that one of the best ways to assess students' oral skills is through group discussion – but while on practicum, under the supervision of an associate teacher who believes that this practice is impossible in a classroom with more than 30 students, the pre-service teacher may be led to reconsider this practice.

University supervisors also play an important role in how pre-service ESL teachers learn to teach and assess in the BEALS programme. According to the instructions that BEALS supervisors receive, one of their roles is to support pre-service teachers in their professional

[10] At the beginning of each practicum, associate teachers, university supervisors and student teachers receive a set of documents including their own roles while on practicum.

reflection by giving constructive feedback on what has been learned and on expected improvements. In order to facilitate this task, the university requires pre-service teachers to attend 4-5 on-campus meetings throughout each practicum. In these meetings, entitled *Cellule d'accompagnement réflexif pour le développement des compétences*[11] (CARDEC), pre-service teachers are invited to share their beliefs, concerns and uncertainties about their practicum and teaching with their classmates and their practicum supervisor. These meetings are important opportunities for practicum supervisors to help their pre-service teachers reflect on their own evaluative beliefs and practices. University supervisors are also encouraged to stimulate reflection on some of the events pre-service teachers lived during their practicum and make connections with their teaching and learning process, and help pre-service teachers make connections between the theory they have learned in their on-campus courses and their practica. For instance, university supervisors can promote reflection by asking pre-service teachers questions about their practices, such as justifying their pedagogical choices, and by making comments about their lesson plans or their daily reflections.

Finally, during each practicum course, pre-service teachers are required to write conceptions of learning and teaching and a series of competency reports (three or four per year) in which they are supposed to reflect on how their conceptions and professional competencies have evolved. In addition, they are also required to film themselves twice and use excerpts of their videos as supporting proof of their development.

4.3 BEALS Pre-service ESL Teachers' Beliefs and Practices related to Formative Assessment

Despite having many opportunities throughout their four years of teacher education programme to develop their assessment skills, we have observed for the last five years for the last five years in our role as a teacher educator and university supervisor that the BEALS pre-service ESL teachers still graduate relying more on their own beliefs than on the theory acquired throughout their four years of teacher education. In addition, we have also observed through the

[11] CARDEC in English could loosely be rendered as "reflective monitoring seminar for the development of competencies."

analysis of students' assignments and discussion of teaching practices while on practicum with other university supervisors and teacher educators that they graduate lacking knowledge and practices related to formative assessment. Thus, in order to provide pre-service ESL teachers with the best possible teacher preparation and to guarantee positive effects on their professional development, it is important to investigate how their beliefs influence their process of learning to teach and assess pupils in order to determine which elements might be missing, and which ones might be improved in their teacher preparation.

In conclusion, we have summarized the main elements that are likely to shape BEALS pre-service ESL teachers' beliefs and practices related to formative assessment in the two following concept maps.

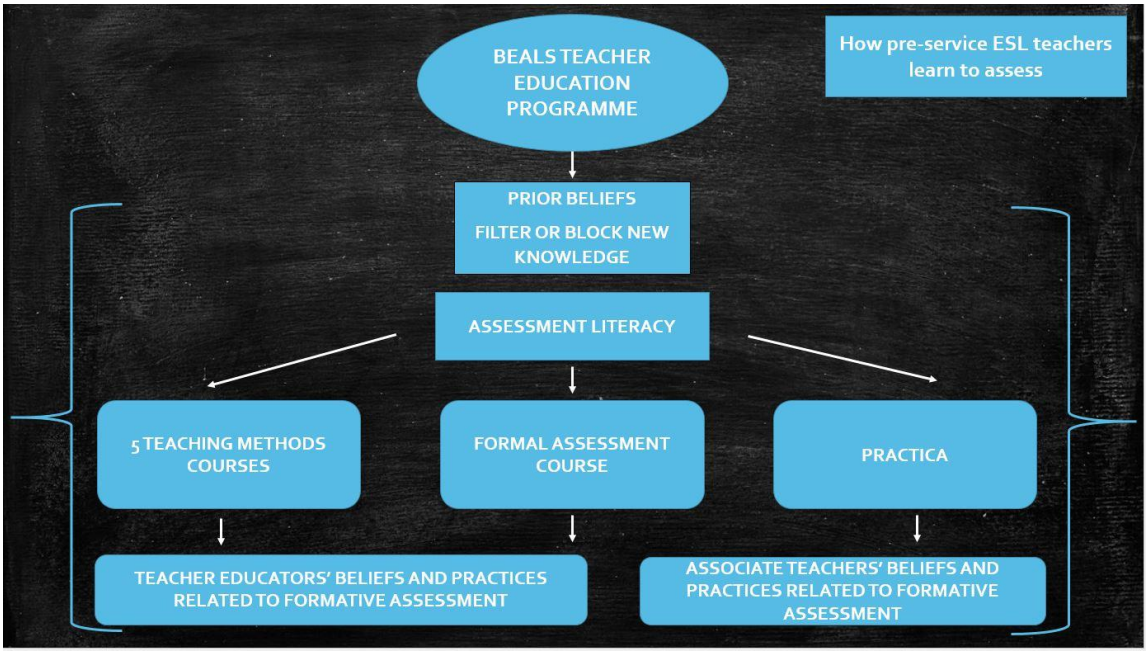

Figure 1. Conceptual map of BEALS pre-service teachers' assessment literacy

The first element that shapes their assessment literacy is their prior beliefs (Calderhead, 1996; Hollingsworth, 1989; Holt-Reynolds, 1992; Lortie, 1975). Next, throughout the four years of teacher education, pre-service ESL teachers' beliefs and practices related to formative assessment are shaped by five teaching methods courses (Clift & Brady, 2005; Graham, 1997; 2005) and one formal evaluation course (DeLuca et al., 2013; Mertler, 2009), in which they are

directly exposed to teacher educators' own beliefs and formative assessment practices. In addition, pre-service ESL teachers' beliefs and practices related to formative assessment are also shaped by their practices while on their fourth practicum, in which they are in contact with their associate teachers' beliefs and practices and their university supervisor's beliefs. The following conceptual map specifically relates to the fourth year of teacher education, on which our study was focused.

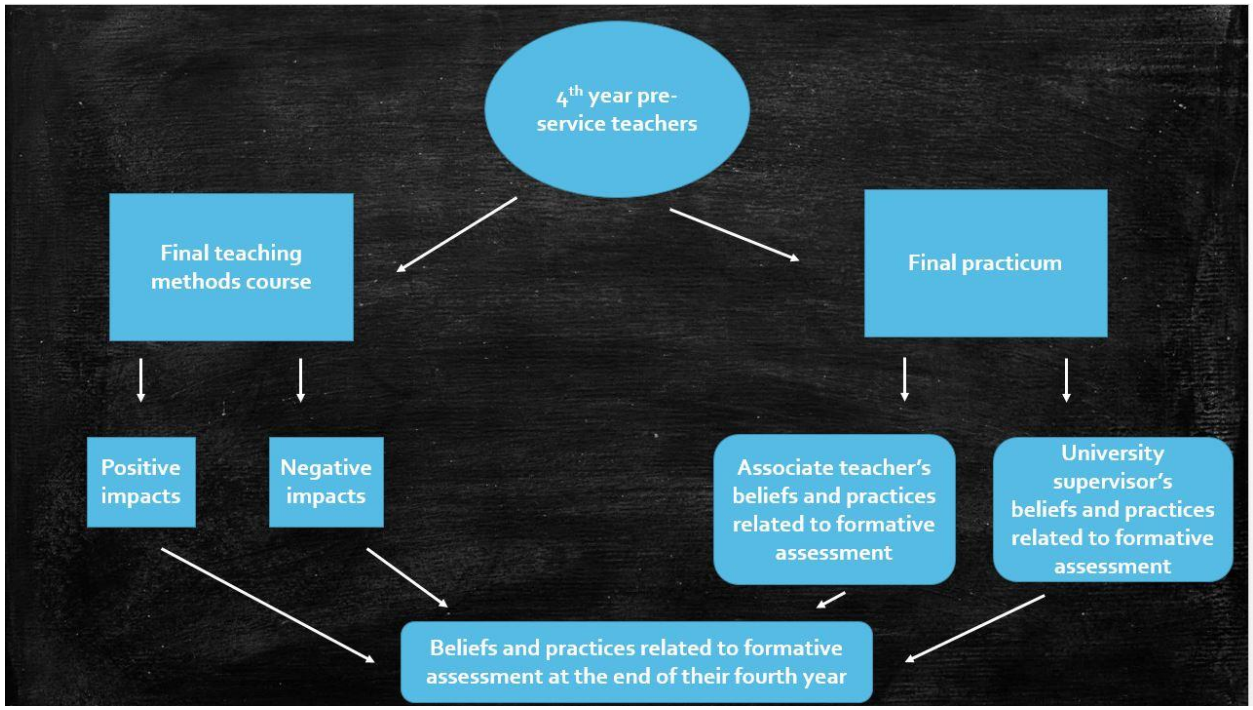

Figure 2. Conceptual map of BEALS fourth year pre-service ESL teachers' beliefs and practices in relation to formative assessment

5. RESEARCH QUESTION

The present study is based on the fact that the literature acknowledges the importance of studying the effects of pre-service teachers' beliefs on their practices as these beliefs filter how new knowledge is acquired. As a consequence, pre-service teachers could end up basing their teaching only on previous experience of teaching and learning languages that do not necessarily match what they learn in the university. Therefore, in order to study how pre-service ESL teachers' beliefs and practices related to formative assessment evolve and determine which elements are missing in their preparation, the following research question was elaborated:

How do 4th year pre-service ESL teachers' beliefs and practices related to formative assessment evolve throughout their last year of teacher education?

In addition, the following sub-questions were also formulated:

What are their beliefs in relation to formative assessment at the beginning of their last year of teacher education?

What are their practices in terms of formative assessment during their practicum?

What are their beliefs and practices related to formative assessment at the end of their teacher education programme?

What elements influenced their beliefs and practices related to formative assessment throughout their last year of teacher education?

As we have already discussed, despite the improvements and changes made in teacher education programmes such as the increase of field experiences, teaching methods courses, or the creation of formal evaluation courses throughout the last decades, based on what we have observed, pre-service teachers are still graduating without having many of their beliefs and practices challenged. As Borg (2003) and Hollingsworth (1989) stated, teacher educators must acknowledge pre-service teachers' prior beliefs when planning and teaching their classes in order to provide meaningful teacher education. Otherwise, pre-service teachers could end up not being able to make connections between the theories presented in their coursework and their teaching experiences.

More specific to the development of assessment literacy, researchers point out that in order to be effective, pre-service teachers must be provided with concrete examples of how to implement formative assessment practices in their classrooms (Dixon et al., 2011; Sikka et al., 2007; Thomas, et al., 2011). If pre-service teachers do not know how to use these formative

assessments learned in their courses and in their practicum, they could end up relying on traditional summative assessment practices that might not match either what they have learned or even their own beliefs.

In the next chapter, in order to help understand how we framed our research question and sub-questions in order to be able to answer them, we will discuss theoretical models that guided the data collection methods that were used in this study.

CHAPTER 2 – THEORETICAL FRAMEWORK

1. THE ROLE OF TEACHER EDUCATION PROGRAMMES IN PRE-SERVICE TEACHERS' PROFESSIONAL DEVELOPMENT

In order to become a teacher, aspiring educators must enroll in a teacher education programme that is expected to provide them the essential knowledge of this profession. However, as discussed in the first chapter, despite the recent improvements made to teacher education programmes, these still appear to have little influence on pre-service teachers' classroom assessment practices given that pre-service teachers often graduate relying more on their beliefs than on the knowledge acquired in their teacher education programme. Thus, in order to understand this phenomenon, we have decided to study how BEALS pre-service teachers' beliefs and practices related to formative assessment evolve throughout their fourth year of teacher education. Therefore, in this chapter we will discuss and present theoretical models that guided our data collection and analyses process.

This chapter is divided into three main sections. In the first section, we will discuss two models of professional development which provide an overview of how pre-service teachers acquire their teacher knowledge. The first model presented here was created by Vanhulle (2009a) and mainly focuses on the role of teacher education programmes in pre-service teachers' professional development. The second model, which was developed by Altet (2008) acknowledges pre-service teachers' own roles and practices as the main elements shaping their learning-to-teach process. In the second section, we will discuss the role of beliefs in shaping pre-service teachers' learning-to-teach process by presenting some aspects of the nature of beliefs according to the literature. In the same section, we will outline how the model developed by Moscovici (2000) will be used in our research to analyze how pre-service teachers' beliefs evolve. In the third section, we will examine the importance of providing pre-service teachers with adequate preparation to perform assessment and formative assessment tasks. Secondly, we will review three formative assessment models (Cowie & Bell 1999; Torrance & Pryor, 2001; Wiliam, 2010) and adopt the most adequate to be used in our study to identify and analyze pre-service teachers' practices related to formative assessment. Finally, we will finish this chapter by presenting the research objectives.

1.1 Teacher Knowledge, Professional Knowledge and Personal Knowledge

In order to understand how the learning-to-teach process unfolds in teacher education programmes, it is important to begin by defining a few terms found in the literature. The first is *teacher knowledge*. According to Grossman and Richert (1988), teacher knowledge can be defined as "a body of professional knowledge that encompasses both knowledge of general pedagogical principles and skills and knowledge of the subject matter to be taught" (p. 54). More subtly, Tamir (1991) suggests that a distinction should be made between the terms *professional knowledge* and *personal knowledge*. In this last author's view, professional knowledge can be defined as the "body of knowledge and skills which is needed in order to function successfully in a particular profession" (p. 263). In terms of personal knowledge, Connelly and Clandinin (1988) define it as:

> A term designed to capture the idea of experience in a way that allows us to talk about teachers as knowledgeable and knowing persons. Knowledge is not found only "in the mind", it is "in the body." And it is seen and found "in our practices." (p. 25)

Finally, Tamir (1991) concludes that "the actual behavior of a person in his or her professional field is a result of interaction between professional and personal knowledge" (p. 265). Accordingly, by studying how pre-service teachers' beliefs and practices evolve throughout their teacher education programme, we expect to understand how pre-service teachers build their learning-to-teach knowledge. In order to see how this evolution plays out and to understand how teacher education programmes contribute to this process, among the many professional models found in the literature, we will discuss two.

1.1.1 Professional development models

We have seen in the first chapter that teacher education programmes have been found to have little influence on pre-service teacher's practice (Almarza, 1996; Calderhead & Robson, 1991; Henrichsen, 2010; Junqueira & Kim, 2013; Kagan, 1992). One of the possible reasons for this phenomenon is related to how these programmes approach pre-service teachers' professional development. According to Vanhulle (2009b), these programmes should not see professional

knowledge as something that pre-service teachers acquire, but rather as something that they build. In order to enhance the quality of teacher education programmes and pre-service teachers' professional development, Vanhulle (2009a) suggests three requirements.

1.1.2 Vanhulle's (2009a) professional development model

According to Vanhulle (2009a), one of teacher education programmes' hallmarks should be that they build their professional knowledge around an epistemological framework that is coherent with the needs and realities of the ambient educational system. Moreover, Vanhulle (2009a) states that within this framework, pre-service teachers would only adopt the knowledge that makes sense to them, thereby helping them build their professional identity. The second requirement mentioned by Vanhulle (2009a) is to see the programme as a place of collective construction. The purpose of teacher education programmes is not only to provide students with knowledge that makes sense to them, but also to help them see themselves as responsible for renewing the educational culture (Vanhulle, 2009a). This requirement highlights the importance of making pre-service teachers aware of their own responsibility in developing their professional knowledge. Finally, the third requirement is that teacher education programmes foster interactive tasks. Vanhulle (2009a) states that these tasks should provide pre-service teachers with opportunities to acquire and transform knowledge collectively and individually. She also mentions that this interactive learning also depends on pre-service teachers' own progressions, resistance or blockages. In terms of the origins of these blockages and resistance, these origins can be traced back to pre-service teachers' prior beliefs and experiences.

Thus, according to Vanhulle's (2009a) model, in order to provide pre-service teachers with the best possible preparation, teacher educators should work in collaboration with other teacher educators, practicum supervisors and associate teachers in order to find out about the current realities and needs of the Quebec classroom. In turn, this will allow pre-service teachers to make links and connect the knowledge taught in their on-campus courses with the knowledge they develop in their classroom practices (while on practicum). In addition, teacher educators, university supervisors and associate teachers should help pre-service teachers reflect on their own beliefs and on the potential impacts of these beliefs on their professional development. Moreover,

the effectiveness of the teacher education programmes will also depend on pre-service teachers' practices and on how pre-service teachers engage themselves in their learning-to-teach process, which are the two central elements of our next professional development model.

1.1.3 Altet's (2008) professional development model

Altet (2008) claims that pre-service teacher's knowledge acquisition varies according to the approach chosen for their professional development. The author identifies three such approaches: (a) the instrumental approach to knowledge – in this approach, pre-service teachers believe that professional knowledge is a series of tools that can be directly applied into classroom practices; (b) professional approach to knowledge – in this approach, pre-service teachers believe that in order to acquire new knowledge, one must take a step back, analyze and reflect on how this new knowledge can be used in the classroom; and (c) intellectual approach to knowledge – pre-service teachers acquire knowledge based on their taste, curiosity and pleasure of learning (Altet, 2008). In order to bridge the gap between theory and practice, pre-service teachers should favour the second approach, that is to say, they should view the knowledge acquired in their teacher education programme as a series of tools that they could use according to different situations they encounter in their teaching careers.

Moreover, Altet (2008) also mentions two possible paradigms related to the role pre-service teachers assign to practica: technological paradigm[12] – within this paradigm, practice is seen as a predetermined response to a predefined professional situation. Similar to the instrumental approach, pre-service teachers following this paradigm believe that the acquired knowledge can be directly applied into practice; biological paradigm[13] – within this paradigm, pre-service teachers believe that knowledge is constructed based on a constructivist approach, i.e., pre-service teachers acquire knowledge "by experimenting and testing new situations, by taking risks, by looking for solutions to problem situations by oneself, and by developing reflective practice through one's own practice" (Altet, 2008, p. 100). Within this second paradigm, teaching is not reduced to merely applying something that was previously planned, but teaching is rather seen as the results of

[12] Our translation.
[13] Our translation.

promoting reflection by problematizing the learning-to-teach process. This second paradigm is related to Altet's (2008) second professional development approach in which pre-service teachers acquire new knowledge by analyzing and reflecting on how it can be applied in the classroom. As highlighted in the first chapter, while in their teacher education programmes, pre-service teachers tend to have higher expectations in terms of acquiring knowledge from their practice (through their practicum experiences) as opposed to from their university courses. For that reason, Altet's (2008) professional development model will be relevant to our study in terms of studying how pre-service teachers' beliefs evolve based on their own involvement in their learning-to-teach process.

In conclusion, despite offering pre-service teachers with many hours of field experiences and university coursework, pre-service teachers' knowledge acquisition and the adoption of one or another of these approaches and paradigms will depend on their beliefs about the learning-to-teach process. For instance, if pre-service teachers believe that university courses should be responsible for providing them with teaching methods that are easily transferred to practice, once in the field, when they are confronted with different elements that preclude such practices, pre-service teachers might tend to believe that the knowledge taught in their university courses is abstract (Dillon & O'Connor, 2011) and unrealistic. As previously stated, to overcome these types of situations, pre-service teachers need the support of their teacher educators, associate teachers, and practicum supervisors. If pre-service teachers are provided with opportunities to reflect on their beliefs and on how to integrate the theories they have been taught in their university classes into their practices, pre-service teachers might be able to make better links between theory and practice, and consequently develop their beliefs and practices related to formative assessment. Thus, based on Vanhulle's (2009a) model, during our data collection phase, we asked our participants questions[14] about what they were taught in terms of formative assessment in their teacher education programme in order to identify missing gaps in terms of their assessment literacy. In addition, based on Altet's (2008) model, by asking our participants questions about their own orientation towards their professional development, we expected to better understand how their beliefs and practices evolve. For that reason, in the next section we will discuss, in more depth, some of the main characteristics of the beliefs and how they could shape pre-service teachers' learning-to-teach process.

[14] For more details about these questions, please refer to the next chapter.

1.2 The Role of Beliefs in Pre-Service Teachers' Professional Development

As discussed in the first chapter, pre-service teachers' prior beliefs seem to filter or block new knowledge to be acquired in their teacher education programmes, and thus shape their professional development (Calderhead, 1996; Freeman & Johnson, 1998; Wideen, et al., 1998). Therefore, in order to better understand this relationship and identify how pre-service ESL teachers' beliefs evolve, we must discuss some of the main features of beliefs.

1.2.1 The nature of beliefs: definitions and characteristics

In the literature, teachers' beliefs have been conceptualized in different ways. For instance, they can be defined as an "individual's judgment of the truth or falsity or a proposition" (Pajares, 1992, p. 316), as "a set of interrelated notions" (McAlpine, Eriks-Brophy & Crago, 1996, p. 392) or as "a set of conceptual representations which store general knowledge of objects, people and events, and their characteristic relationships" (Hermans, van Braak, & Van Keer, 2008, p. 128). For the purpose of this study, we will adopt Barcelos's (2006) definition of beliefs as "a way of thinking, as constructions of reality, a way of seeing and perceiving the world and its phenomena, co-built in our experience and resulting from an interactive process of interpretation and (re)signification" (p. 16). More specifically, studying pre-service ESL teachers' beliefs is a way of understanding how they learn to assess, and could provide insights on how teacher preparation can be improved so that pre-service teachers graduate in possession of necessary knowledge to perform such tasks.

In contrast, beliefs can also be categorized in such a way as to identify patterns within a group (whether pre-service teachers, novice teachers or experienced teachers) (Levin, 2015). Despite being personal and unique and having many definitions, for the purpose of this research, beliefs will be analyzed based on the following characteristics: (a) implicit and explicit, (b) stable or dynamic, (c) situated or generalized; and (d) linked to individual propositions or larger systems (Fives & Buehl, 2012).

1.2.1.1 Implicit and explicit

Wilcox-Herzog, Ward, Wong and McLaren (2014) state that one of the ways to enhance the education and training teachers receive is by determining whether their beliefs are implicit or explicit. Implicit beliefs guide and filter teachers' behavior about teaching experiences without their awareness (Fives & Buehl, 2012) and are stable and slowly constructed through experience (Wilcox-Herzog et al., 2014). In addition to being beyond the teachers' control, implicit beliefs cannot be influenced through individual reflective practice (Nespor, 1987). Conversely, researchers claim that explicit beliefs are built on the gathering of factual information, can be characterized as dynamic (Wilcox-Herzog et al., 2014), and can be changed by small amounts of information (Rydell & McConnell, 2006).

1.2.1.2 Stable or dynamic

Teachers' beliefs can also be seen as stable and resistant to change (Gooya, 2007; Kagan, 1992; Pajares, 1992) or as fluid and dynamic (Lieberman, 1995; Graham, 2005; Peacock, 2001). In this vein, researchers need to consider the types of beliefs that are more likely to change and the factors (including teaching experiences) that will contribute to those changes (Fives & Buehl, 2012). Moreover, studies show that recently acquired beliefs are the ones most likely to change, as opposed to deep-rooted, cultural and educational beliefs (Gabillon, 2012; Pajares, 1992; Williams & Burden, 1997).

1.2.1.3 Situated or generalized

According to Fives and Buehl (2012), teachers' beliefs should not be studied in terms of whether they change or not, but rather whether they vary or remain unchanged through different teaching contexts. For instance, a pre-service teacher may have a stable belief related to formative assessment practices, but when provided with more information from a specific learning context, that belief could evolve (or remain unchanged). Moreover, some researchers view teachers' beliefs as context-dependent, in which case they are inclined to change according to a specific situation, such as the teaching content, the school's physical resources or type of students (Verjovsky &

Waldegg, 2005). Others consider beliefs as context-independent, in which case teachers' beliefs remain unchanged despite different contexts (Hermans et al., 2008). However, as Fives and Buehl (2012) state, this conflict can be resolved if beliefs are acknowledged to be flexible, since they are often activated or espoused according to the teachers' or pre-service teachers' context.

Since BEALS pre-service ESL teachers are placed in different practicum contexts each year and assigned different supervisors, this characteristic of belief is one of the most important to take into consideration. For instance, depending on their previous practicum context, on their associate teachers' teaching practice and on their supervisors' beliefs, some fourth year pre-service ESL teachers might begin their last practicum having had more teaching experience with formative assessment than others, which would consequently influence the evolution of their beliefs and practices.

1.2.1.4 Linked to individual propositions or larger systems

According to Fives and Buehl (2012), beliefs have been acknowledged to exist within a system. For instance, Pajares (1992) affirms that beliefs substructures (e.g. educational beliefs) must be studied not only in terms of their relation to each other but also with their connections to other more central ones. In other words, in the case of our study, in order to understand pre-service teachers' formative assessment beliefs, we should also study their beliefs about teaching and learning. Bryan's (2003) study successfully illustrates the impacts of studying beliefs as a system. Through an analysis of data collected using interviews, observations and written documents, Bryan (2003) identified six subcategories of beliefs that were divided into two main categories: foundation beliefs and dualistic beliefs. Furthermore, Bryan (2003) divided these dualistic beliefs into two opposing but harmonious "nests" of beliefs (Nests A and B). Bryan (2003) states that beliefs placed in Nest A were:

> …characterized by didactic, teacher-centered talk and actions—teacher as organizer and deliverer of content knowledge; teacher-directed instructional methods (e.g., demonstrations, recall questions, giving of hints and clues, and drill and rehearsal); and few opportunities for students to generate questions or procedures. (p. 850)

On the other hand, Nest B included beliefs based on the participant's vision of a hands-on science classroom represented by a more conceptual teaching style. For that reason, although this study focuses on beliefs related to formative assessment, other central beliefs, such as beliefs about the teaching and learning process, will also be studied as they might influence how pre-service teachers assess their pupils learning.

We have established that teachers' beliefs can be implicit and explicit, stable or dynamic, situated or generalized, and linked to individual propositions or larger systems (Fives & Buehl, 2012). However, in relation to studying how teachers' beliefs evolve, researchers also acknowledge the importance of identifying their possible types.

1.2.2 Types of beliefs: core and peripheral

According to the literature, beliefs can be classified as core or peripheral. Core beliefs are stable and enacted[15] beliefs that have a more powerful influence on teachers' behavior as opposed to peripheral ones, which can be defined as stated but not enacted beliefs (Haney & McArthur, 2002; Phipps & Borg, 2009). Haney and McArthur (2002) give two examples that illustrate both types in the classroom. According to these authors, an example of a core belief would be when a teacher claims that he or she believes in student problem-solving through group work, and when evidence of such practices can be seen in his or her lesson plans or observations. Peripheral beliefs, on the other hand, can be illustrated when a teacher affirms that he or she believes in student negotiation and problem-solving practices, but no such evidence can be found in his or her classroom practices. According to Gill and Hoffman (2009), identifying teachers' core beliefs is a difficult yet important task, as it provides a framework to understand teachers' thinking process of how important curricular and pedagogical decisions are made in their own classroom.

Phipps and Borg's (2009) study illustrates the importance of identifying teachers' types of beliefs when studying the relationship between teaching beliefs and practices. Through their analysis, Phipps and Borg (2009) found that not all of their participants' beliefs and practices were

[15] Researchers use the term *enacted* to refer to beliefs that are observed in action (classroom practices).

generally aligned, as there were tensions between teachers' stated beliefs and their practices. Among the factors that made teachers teach in different ways from their stated beliefs, Phipps and Borg (2009) found student expectations and preferences and classroom management issues. Furthermore, these authors suggest qualitative strategies to explore language teachers' actual practices and beliefs in order to further understand the relationship between teachers' beliefs and practices.

Therefore, in order to identify, analyze and classify pre-service ESL teachers' beliefs, we have chosen to adopt the model used by Gabillon (2012), which was based on Moscovici's theory of social representation (Moscovici, 2000). We have chosen to use this model since it incorporates many of the previously mentioned characteristics of beliefs.

1.2.3 Moscovici's belief appropriation process

According to Gabillon (2012), Moscovici's theory of social representations focuses on "the process through which knowledge (e.g. beliefs, images, ideas, etc.) is produced, transformed, and transmitted into the social world" (p. 196). In addition, Moscovici (2000) states that when someone is confronted with a new idea, he or she may perceive it as a threat and therefore will attempt to make the unknown explicit. For instance, that would be the case when pre-service teachers are asked by their associate teachers (while on practicum) to adopt a teaching or an assessment or approach that they are not familiar with or have never tried before. At first, they will try to make it familiar to what they already know before truly adopting it as their own approach. Furthermore, Moscovici (2000) affirms that what is known will always prevail when it conflicts with something unknown. Once what was unknown is transformed into something familiar, it will be added to a known category. As illustrated in Figure 3, this process, entitled the "appropriation process," is made up of two interdependent mechanisms: anchoring and objectification (Moscovici, 2000). While anchoring has the purpose of "anchoring" the unknown information to a familiar category shared by the same group of people/society (Gabillon, 2005, 2012), objectification on the other hand, transforms something abstract into something concrete, familiar to what the individual already knows.

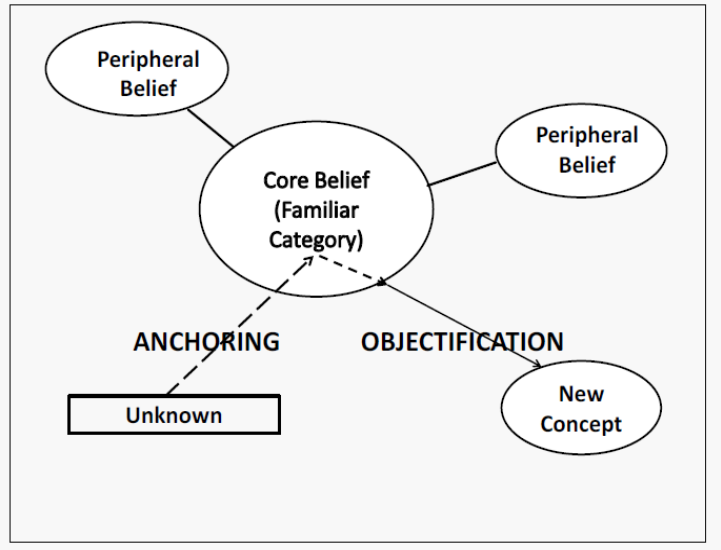

Figure 3. Schematic representation of Moscovici's appropriation process (Gabillon, 2012, p. 197)

In terms of the relationship between these mechanisms and beliefs, Gabillon (2005) states that beliefs are formed by "a process whereby what is already known and familiar serves as a point of reference and comparison (anchoring) and new information is absorbed into what is already familiar and reassuring (objectivation)" (p. 247). For instance, this is what happens when pre-service ESL teachers, while on practicum, are faced with associate teachers' routines or practices that they are not familiar with. The first step that they should take is to try to understand this routine or teaching practice (make the unfamiliar known), before deciding whether or not to fully incorporate it into their own practices. However, pre-service teachers may also simply follow their associate teachers' routines or teaching tasks based on fear of failing their practicum or showing a lack of respect.

Despite the fact that beliefs have different forms and values, an individual will always have a core belief that will connect the other beliefs together (Gabillon, 2012). Based on Moscovici's (2000) appropriation model and Abric's (1989) central kernel theory, as illustrated in Figure 4, Gabillon (2012) created a model that represents the relationship between second language teachers' core and peripheral beliefs.

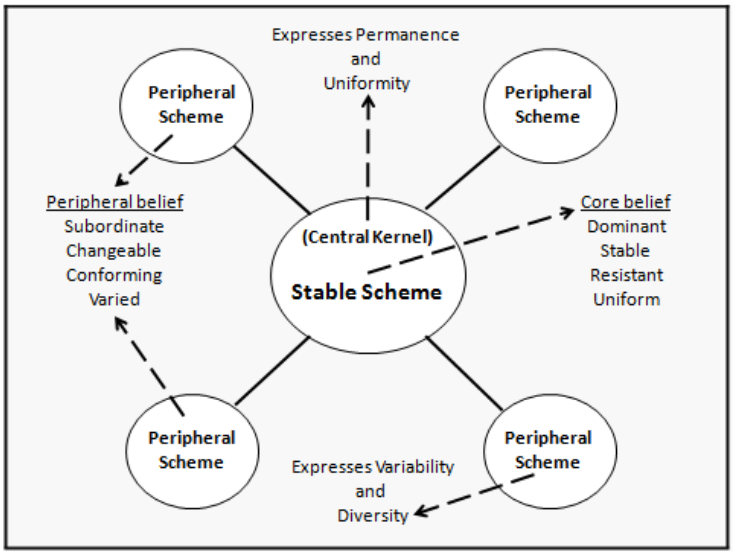

Figure 4. Schematic representation of the central kernel theory (Gabillon, 2012, p. 198)

> In this model, second language (L2) teachers' beliefs are:
>
> Constructed, reconstructed and appropriated each time the teacher is confronted with a new concept in his/her social environment. As the L2 teacher gains experience in diverse contexts, new beliefs are formed and these new peripheral beliefs are anchored to the core beliefs that already exist in the teacher's belief repertoire. (Gabillon, 2012, p. 198)

In addition, according to this model, L2 teachers' core beliefs are uniform and well-organized, precede their teaching experience, represent the social standards and they dominate peripheral ones. On the other hand, peripheral beliefs are personal, less resistant to change, less systematic and despite being more challenging to explicitly express, they can be mediated (Gabillon, 2012). In terms of our study, based on Moscovici's (2000) model, we will study how pre-service teachers' beliefs evolve by comparing their initial core and peripheral beliefs related to formative assessment at the beginning of their fourth year of teacher education with their beliefs at the end of their programme.

Thus, beliefs are important elements to be studied as they shape pre-service teachers' learning-to-teach process. Since our study focuses on beliefs and practices related to formative

assessment, the next section will explore how pre-service teachers' beliefs related to assessment could influence these practices.

1.3 Beliefs related to Assessment

As previously discussed, beliefs have been conceptualized in different ways and there is no consensus among researchers. In addition, some researchers opt to use different terminologies when referring to beliefs, such as "untested assumptions" (Calderhead, 1996), "B.A.K. (beliefs, assumptions and knowledge, Woods, 1996), values (Pajares, 1992; Nespor, 1987) and "implicit theories" (Clark & Peterson, 1986), to mention a few. In the field of classroom assessments, one important term to consider and define is *conceptions*. Thompson (1992) specifically chose to adopt the term conceptions, as a way to designate "a more general mental structure, encompassing beliefs, meanings, concepts, propositions, rules, mental images, preferences, and the like" (p. 130). According to Brown et al. (2011), teachers' conceptions of various aspects of education could influence how they teach and how students learn. In addition, these authors claim that "teacher's beliefs about students, learning, teaching and subjects influence assessment techniques and practices" (Brown et al., 2011, p. 210). For the purposes of this study, the term *conceptions* will be used mainly to refer to pre-service teachers' formative assessment beliefs.

In relation to classroom assessment practices, Barnes, Fives and Dacey (2014) state that "the concept of a conception subsumes knowledge and belief into a singular construct and provides a framework for describing teachers' overall perception and awareness of assessment" (p. 285). Since one of our data collection tools will be based on Brown's (2004) conceptions of assessment, next we will discuss the four most common conceptions developed by Brown (2004).

1.3.1 Brown's conceptions of assessments

For Brown (2004), teachers' beliefs related to assessment can be understood based on four conceptions: (a) assessment as a way to improve teaching and learning; (b) assessment as a way to certify students' learning; (c) assessment as a way to demonstrate the quality of schools; and (d) assessment as something irrelevant to the work of teacher and students' learning.

In this first conception, assessment is seen as a tool used by teachers and students to improve learning and the quality of teaching (Barnes et al., 2014; Black & Wiliam, 1998; Brown, 2004). According to Brown (2004), improvements depend on two prerequisites: "assessment must describe or diagnose the nature of student performance" and "the information must be a valid, reliable, and accurate description of student performance" (p. 304). Furthermore, as Barnes et al. (2014) point out, this conception unites "notions of formative assessment, diagnostic assessment, and validity under the umbrella belief that assessment improves education" (p. 289). Teachers who adopt this conception use techniques such as informal teacher-based intuitive judgment and formal assessment tools to diagnose student learning (Brown, 2004).

The second conception is based on the assumption that assessments should be used to make students responsible for their own learning. Moreover, the assessments used in accordance with this type of conception have high-stakes consequences for pupils, such as graduation, entry selection to higher levels of education, retention in grade, and assignment to remedial education classes (Brown et al., 2011). For instance, in Harris and Brown's (2009) study in Hong Kong, some teachers considered assessments as an "extrinsically motivating" source, and were seen as either encouraging to high-achieving students or discouraging to lower achieving ones.

In the third conception of assessment, assessments are used to "make teachers and schools accountable through evaluations of student performance, typically on high-stakes tests" (Barnes et al., 2014, p. 290). For instance, in Harris and Brown's (2009) study, teachers considered reporting students' grades to their parents as one of the purposes of assessment and it was intended to work in collaboration to help students, provide parents with comparative information (if their child was average, above average or below average), or defend their grades. Davis and Neitzel (2011) also identified this type of conception, as some of their participants claimed to use assessment to inform parents what they (the parents) wanted to know about their child's progress.

The assumption behind the fourth conception is that assessment, usually seen as "the formal, organized process of evaluating student achievement, should be rejected because it is invalid, irrelevant and negatively affects teachers, students, curriculum and teaching" (Neibling, 2014, p. 16). For example, in Harris and Brown's (2009) study in Hong Kong, teachers considered

the assessments that were primarily geared toward Ministry of Education or school directives as being irrelevant, inaccurate or negative for teachers, students and learning.

In conclusion, as Brown (2004) states, these different conceptions could interact in various ways, thereby resulting in different practices. For instance, if a teacher believes assessments are irrelevant, he or she could also believe that teachers are responsible for improving students' learning, but not necessarily through assessments. Based on analysis of participants' beliefs and practices related to formative assessments, and by identifying the conceptions behind them, we expect to find out how these elements interact with each other and how they evolve throughout the last year of the pre-service teachers' education programme.

1.3.2 Relationship between beliefs and practices.

According to Barnes et al. (2014), in order to change teachers' assessment practices, it is necessary to change their related beliefs and conceptions. In addition, Muñoz, Palacio and Escobar (2012) point out that understanding the connection between teachers' beliefs about assessment and how they influence their practice is important because "different conceptions lead to different assessment practices; institutional efforts to promote shared understanding criteria would be pointless if teachers' beliefs are not taken into account" (p. 146). Thus, Muñoz et al. (2012) conducted a study with 62 Colombian teachers from a private university to examine their assessment-related beliefs and conceptions based on Brown's (2004) conceptions of assessment. Through the analysis of surveys, interviews and written reports of the participants' teaching experiences, Muñoz et al. (2012) found that although the participants strongly believed in the *conception of assessment for improvement*, they tended to use summative assessment techniques, given that they did not use assessment results to improve student learning. By way of conclusion and as a suggestion for improving such situations, Muñoz et al. (2012) recommend providing teachers with professional development opportunities so that they can reflect on their own beliefs and thereby bridge the gap between their assessment-related conceptions and practices.

Delandshere and Jones's (1999) study also illustrates the impacts of assessment-related conceptions on teachers' practices. To identify the factors that influenced teachers' conceptions

about assessment in a reform movement context, Delandshere and Jones (1999) conducted a study with three elementary mathematics teachers. After analyzing data collected through interviews, these researchers found that despite efforts to implement more complex and meaningful assessments, participants' conceptions were influenced by their limited understanding of their own subject matter, the learning process, and externally defined purposes of assessment. Consequently, these beliefs led to limited summative assessment practices and teachers being dissatisfied with not being able to learn about their own teaching and student learning (Delandshere & Jones, 1999).

As these studies highlight, in order to study teachers' beliefs, it is also important to investigate their conceptions of assessments and the teachers' relationship with practices. For that reason, our study focuses not only on pre-service ESL teachers' beliefs and conceptions about assessment but also on their descriptions of their own classroom practices.

1.3.3 Frameworks of formative assessment practices.

As discussed in the first chapter, teachers are required to constantly assess their students in order to improve their learning (DeLuca & Klinger, 2010). In order to do so, teachers make use of formative assessment techniques such as observation, questioning strategies, discussion, writing assignments, classroom quizzes and tests, homework, and projects (Black & Wiliam, 1998; Dirksen, 2011; Neibling, 2014). However, successfully integrating these techniques requires adequate instruction and preparation (Song & Koh, 2010; Thomas et al., 2011). Therefore, in order to identify and analyze pre-service ESL teachers' formative assessment classroom practices, three formative assessment models were consulted: Torrance and Pryor's (2001); Wiliam's (2010); and Cowie and Bell's (1999).

Based on the findings of a previous study on the classroom assessment practices of infant (ages 5-7) classroom teachers, Torrance and Pryor (2001) created a model of formative classroom assessment. These authors were able to identify two approaches to formative assessment that were associated with the teachers' different views of learning. These practices were: *convergent* – when teachers were interested in finding out whether the learners knew, understood or could perform predetermined tasks; and *divergent* – when through less detailed planning that focused more on

open questions and tasks, teachers were interested in finding out what learners knew, understood and could do (Torrance & Pryor, 2001). Furthermore, based on their analysis of the participants' classroom formative practices during phase one as well as on their previous work, Torrance and Pryor (2001) created an analytic framework tool to be used to describe and analyze their participants' formative assessment practices. Despite the fact that this tool covers relevant items related to formative assessment practices, due to its level of complexity (classroom formative assessment practice is divided into fourteen steps), we have chosen not to adopt Torrance and Pryor's (2001) model in our study.

In the second model consulted, besides acknowledging the importance of the teachers' role in the formative assessment process, Wiliam (2010) also considers the roles that the learners themselves and their peers have in this process. In other words, teachers, peers and learners are responsible for promoting formative assessments guided by a three-question strategy process (where learners are in their learning, where they are going, how to get there). Since pre-service teachers might not necessarily involve their pupils in their formative assessment practices, we also decided not to adopt Wiliam's (2010) model.

Finally, based on our close examination of the three models consulted, we have chosen to adopt Cowie and Bell's (1999) mainly due to its compatibility to the reality lived by pre-service teachers in their practicum context. Therefore, since this will be the model used in our research, we will discuss this model in more depth.

1.3.4 Cowie and Bell's (1999) model of formative assessment

Cowie and Bell (1999) propose a model based on the findings of a two-year study involving ten science teachers and their formative assessment practices. Similar to Torrance and Pryor's (2001) model, Cowie and Bell (1999) also identified two types of formative assessment: planned and interactive.

According to Cowie and Bell (1999), planned formative assessment defines how information is collected, interpreted and acted on by teachers. This type of assessment is used to

obtain general information from the entire class about pupils' progress in relation to the curriculum (Cowie & Bell, 1999) and can be characterized by three interrelated aspects: eliciting, interpreting and acting on assessment information (p. 103).

In relation to the first step, in Cowie and Bell's (1999) study, teachers planned specific assessment tasks to *elicit* information on their pupils' skills and understanding. According to Cowie and Bell (1999), the teachers' purposes for eliciting information often varied throughout the current unit. For instance, at the beginning of a unit, teachers would plan to formatively assess their students to gain information that would help guide their teaching throughout the rest of the teaching unit (Cowie & Bell, 1999). During the unit, using specific assessment activities, teachers planned to elicit formative assessment information on how students were constructing their knowledge (what they actually learned about what was being taught). And finally, teachers planned to elicit formative assessment at the end of their unit in order to formatively assess their own teaching so that they could make any changes or improvements the next time they taught the same unit.

The second step of Cowie & Bell's (1999) planned formative assessment model was *interpreting the information*. The main purpose of this step is to see whether the students learned the content the teachers expected them to learn. Cowie and Bell (1999) point out that teachers' interpretations of their planned formative assessment were also influenced "by their expectations of the understanding which was likely with students at a particular age or in a particular year of schooling" (p. 105). Another important factor that teachers claimed to have influenced how they interpreted the information collected through their planned formative assessment was their knowledge base (Grossman & Richert, 1988). Being able to interpret collected information is important to ESL teachers in Quebec, as the Ministry expects them to use assessment as an integral part of the learning process in order to guide and support students' learning (Gouvernement du Québec, 2001a).

After having elicited and analyzed the collected information, teachers get to perform the most important aspect of formative assessment: *take actions to enhance students' learning* (Cowie & Bell, 1999). To do so, Cowie and Bell (1999) affirm that teachers need to have planned "a

flexible program and to allow for ways in which she or he could act in response to the information gathered" (p. 105). Moreover, Cowie and Bell (1999) state that "the teachers' pedagogical knowledge informed the taking of action as part of the process of formative assessment" (pp. 105-106). As discussed in the first chapter, Quebec ESL teachers (and pre-service ESL teachers) have access to two documents (Gouvernement du Québec, 2009a, 2010a) that provide them with information about the knowledge students are expected to acquire in each grade. Therefore, since pre-service ESL teachers are encouraged to use these documents when preparing their classes, despite their lack of experience, BEALS pre-service ESL teachers are also qualified to take actions to enhance students' learning.

The second type of formative assessment observed by Cowie and Bell (1999) was *Interactive Formative Assessment*. According to these authors, this type of assessment happened during student-teacher interactions and was mainly intended to mediate the learning of individual students in relation to the subject (science) and social and personal learning. In addition, it differed from the first type of assessment in that interactive formative assessment emerged from a learning activity and was previously planned (Cowie & Bell, 1999). Furthermore, the interactive formative assessment process involved three aspects: "the teachers noticing, recognizing and responding to student thinking during these interactions" (Cowie & Bell, 1999, p. 107).

The first aspect to consider in relation to interactive formative assessment is *noticing*. Cowie and Bell (1999) assert that teachers were able to obtain ephemeral information through students' communication, both "verbal (student comments and questions) and non-verbal (how they did practical activities, how they interacted with others, the tone of discussions and their body language)" (p. 108). Moreover, teachers were also able to notice information about "what sense the students were making (whether it fell within their intended learning or not)" (Cowie & Bell, 1999, p. 109). In addition, Cowie and Bell (1999) affirm that teachers were able to notice information about different students at different moments by interacting with them.

While observing, talking or listening to their students, teachers were able to notice information and *recognize* its importance in the development of their personal, social or subject-related understanding (Cowie & Bell, 1999). In addition, these authors also state that teachers

claimed that noticing and recognizing information were also influenced by their previous teaching experiences (prior knowledge of the individual student) and their pedagogical knowledge and their context knowledge (Cowie & Bell, 1999). As in the case of planned formative assessment, teachers believed that interactive formative assessment "was difficult for beginning teachers and for experienced teachers with a new class, say at the beginning of the year" (Cowie & Bell, 1999, p. 109). Furthermore, Cowie and Bell (1999) state that "their [teachers'] awareness of student thinking (what they noticed and recognized) was often triggered if a student response was unexpected or incorrect, or if a number of students indicated that they held a similar view" (p. 109). Despite not having much teaching experience or contact with their students, BEALS pre-service ESL teachers are able to recognize some of the information they collect during in-class activities with a view to preparing follow-up activities, in order to enhance their students' learning depending on their associate teachers' support and on the MEES progression of learning guidelines.

Therefore, based on Cowie and Bell's (1999) model, we will identify and study how pre-service ESL teachers' formative assessment practices evolve while they are on their intensive final practicum. Once these practices are identified and analyzed, we will compare them with pre-service teachers' beliefs at the beginning and at the end of their fourth year in order to identify the relationship between pre-service teachers' beliefs and practices.

In conclusion, in relation to the previously mentioned models and frameworks, we have illustrated in the table below how these frameworks helped us answer our research question.

Framework	Goal
Professional development models (Altet, 2008; Vanhulle, 2009)	Identify pre-service ESL teachers' approach to programme and practicum and its impacts on their professional development throughout their fourth year
Characteristics of beliefs (Fives & Buehl, 2012; Gabillion, 2005, 2012; Moscovici, 2000)	Understand how pre-service ESL teachers' beliefs affect their formative assessment practices and professional development
Brown's (2004) conceptions of assessments	Identify pre-service teachers' conceptions of assessment and how they evolved throughout their fourth year
Formative assessment model (Cowie & Bell, 1999)	Identify pre-service ESL teachers' formative assessment practices during their praticum

Table 1: *Summary of the theoretical framework used.*

2. RESEARCH OBJECTIVES

As we discussed in the first chapter, despite the improvements and changes made in our teacher education programme, it still seems to have little impact on pre-service teachers' beliefs and practices. Thus, we expect to investigate this situation by studying how pre-service ESL teachers' beliefs and practices related to formative assessment evolve throughout their fourth year of teacher education and achieve our five objectives:

1) Identify pre-service ESL teachers' stated beliefs related to formative assessment at the beginning and at the end of their 4th year of teacher education;

2) Identify pre-service ESL teachers' formative assessment practices and stated practices during their fourth practicum;

3) Describe the relationships between the characteristics of beliefs and practices related to formative assessment and pre-service teachers' professional development;

4) Describe the influence of pre-service ESL teachers' professional development model and approach to practicum on the evolution of their beliefs and practices related to formative assessment;

5) Identify the elements that could influence, shape and consolidate their beliefs and practices during their 4th year in the programme.

Furthermore, we expect these five objectives to shed light on the impacts that teacher education programmes have on how pre-service ESL teachers learn to teach and assess, so that teacher educators, supervisors and associate teachers can improve/adjust their practices with a view to ultimately enhancing teacher education programmes.

In order to achieve these objectives, in the next chapter, we will present and justify our methodological choices based on the theoretical framework presented and discussed in this chapter.

CHAPTER 3 – RESEARCH METHODOLOGY

1. RESEARCH METHODOLOGY

In our first chapter, we discussed the importance of acknowledging the role of beliefs in teacher education programmes, as they can filter or block out programme-related experiences (Freeman & Johnson, 1998; Wideen et al., 1998). In the second chapter, we first reviewed two professional development models (Altet, 2008; Vanhulle, 2009) that will be used to analyse some of our findings. Then, we presented some of the characteristics of beliefs (Fives & Buehl, 2012) that will also help us understand how pre-service ESL teachers' beliefs affect their formative assessment practices. Finally, we discussed formative assessment models that were consulted in order to identify pre-service ESL teachers' formative assessment practices (Cowie & Bell, 1999; Torrance & Pryor, 2001; and Wiliam, 2010). In order to clearly explain our research methodology, we have divided this chapter into three main sections. In the first section, we will justify our methodological approach. In the section that follows, we describe our research context and research sample. Finally, in the third section, we will present our data collection tools by discussing some of their advantages and limitations in researching teachers' beliefs and we will conclude by explaining our data analysis process.

1.1 Methodological Approach

In order to truly understand how fourth year pre-service ESL teachers' beliefs and practices related to formative assessment evolve throughout their last year of teacher education, we opted for a qualitative descriptive study. According to Dörnyei (2007), the characteristics of qualitative research include flexibility in responding to new details or avenues that might appear during the investigation process, a more prolonged contact with the research setting due to the fact that it takes place in a natural environment, and a principal focus on the subjective opinions, experiences and feelings of individuals. In addition, qualitative research is also useful in order to understand complex situations (such as teachers' beliefs), as it broadens and deepens our comprehension through rich collected data that is based on participants' experience (Bogdan & Biklen, 2007;

Dörnyei, 2007). In addition, we opted for qualitative research due to its descriptive nature, given that it focuses on conditions or relationships that exist, practices that seem to prevail, beliefs or attitudes that are held by an individual or group, or processes that are going on (Best, 2005).

As discussed in our second chapter, many aspects of teacher education programmes have been found to have little impact on pre-service teachers' classroom practices (Bullock, 2011; Cochran-Smith, 2003; Kosnik & Beck, 2009). Moreover, researchers claim that this phenomenon is attributable to pre-service teachers' beliefs, which shape how new knowledge[16] is acquired. Thus, by studying the relationship between pre-service ESL teachers' beliefs and their actual practices relating to formative assessment while on practicum, we expect to determine which elements are most relevant in shaping their beliefs and practices with a view to ultimately fostering professional development. In addition, this approach allowed will allow us to identify missing elements in their teacher preparation that could help pre-service teachers better bridge the gap between the theories advocated in their programmes and pre-service teachers' practices. In the next section, we will describe our research context and research sample.

1.2 Research Context and Research Sample

As previously mentioned, this study took place in the province of Quebec, and more specifically, at the Université de Sherbrooke with BEALS fourth year pre-service ESL teachers. In their fourth year of the programme, which is divided into two semesters (fall and winter), these pre-service teachers first attend classes on campus during the fall semester. In the following semester, they go on practicum. The main difference between their fourth-year practicum and their first three practica is length. On their fourth practicum, pre-service teachers have a total of 60 days to complete in a classroom setting. First, they have 15 non-consecutive practicum days to complete in the fall session, in which they observe their associate teachers' teaching, perform small teaching tasks, and learn about the school milieu. They subsequently begin their 45-day intensive teaching practicum in the winter semester. Since their fourth-year practicum is their longest, and done

[16] In this study, (new) knowledge relates to (new) assessment theories and practices. In other words, in order to see how their beliefs and practices related to formative assessment evolved, we questioned our participants throughout our study what new knowledge related to formative assessment they were able to acquire and apply on practice.

individually, pre-service ESL teachers have the chance to create and implement their own formative assessment practices and evaluation tools, which was one of the main reasons why we decided to focus on fourth year students.

1.2.1 Ethical considerations

Participation in our study was completely voluntary. Participants were invited to be part of our study and were made aware of their right to withdraw from it at any moment. Once participants accepted to be part of our study, their names were replaced by different ones so their identity remains confidential. Since the author was also teaching a fourth-year course (Professional Essay) in collaboration with another lecturer, in order to avoid any possible conflict of interests, the researcher decided not to be responsible for correcting any of the participants' assignments. Although initially our goal was to select participants that were not being supervised by the author, due to a lack volunteers, we had no choice but to also allow the researcher's students to be eligible to participate in the study. In order to ensure validity and impartiality, we asked a colleague to collect all the data with the researcher's students before their grades had been submitted. Furthermore, participants will be granted the right to receive information on the results of my study once these are available. In the next subsection we will describe more information concerning the participants that took part in this study.

1.2.2 Participants

In order to study how pre-service ESL teachers' beliefs and practices related to formative assessment evolve throughout their last year of the teacher education programme, we conducted our study with 6 participants. There were two male teachers and 4 females teaching ESL at different levels and in different contexts, aged between 20 to 25 years old. The majority of our participants had only experienced teaching and assessing in our programme (previous practica): high school during their second practicum and primary during their third one. However, Carlos reported having taught ESL at the Adult Education level prior to his entry to the programme. The participants that were being supervised by this study's main researcher were: Mélissa, Claire, Isabelle and Marc-Antoine. The others worked with a different supervisor during the practicum.

Name	Context
Annabelle	High school (Different groups and grades)
Carlos	Primary (1 Intensive grade 6 group)
Mélissa	Adult Education (Multilevel groups)
Claire	High school (Different groups and levels)
Isabelle	Primary (1 Intensive Grade 6)
Marc-Antoine	High school (Different groups and levels)

Table 2: *Participants and teaching contexts*

2. DATA COLLECTION TOOLS

In contrast with the mid-1980s, when research on learners' beliefs was often based on questionnaires with Likert-scale answers and descriptive research, most current inquiries are qualitative in nature, emphasizing a contextual approach involving many different data collection instruments[17] (Barcelos & Kalaja, 2011). In terms of identifying and assessing teachers' beliefs, several data collection methods in the literature have been used in the fields of applied linguistics and education (Barcelos, 2006; Fives & Buehl, 2012). Thus, in order to answer our research question and sub-questions, we collected data using four data collection instruments: questionnaires, semi-structured interviews, stimulated recall, and narratives.

2.1 Questionnaires

One of the most common data collection tools found in ESL research, which was used in our study, is the questionnaire. According to Dörnyei (2010), questionnaires' popularity comes from the fact that they are versatile and provide information in a form that can be easily processed. Questionnaires are defined by Brown (2001) as "any written instruments that present respondents

[17] According to Barcelos and Kalaja (2011), some other possible data collection instruments used in studies of beliefs are learning journals, self-reports, language learning histories, video-recordings of classroom sessions, informal conversations, drawings, classroom observation, school artifacts, postings on an online discussion forum, and sentence-completion tasks.

with a series of questions or statements to which they are to react either by writing out their answers or selecting from among existing answers" (p. 6).

The two most common types of questionnaires found in the literature are those containing closed-ended items and those with open-ended items. Closed-ended questionnaires are defined as those made up of questions containing "ready-made response options to choose from, normally by encircling or ticking one of them or by putting an X in the appropriate slot/box" (Dörnyei, 2010, p. 26). Among the advantages of this type of questionnaire, Dörnyei (2010) mentions that because of the way they are developed, there is no room for subjectivity, which greatly facilitates the data analysis process. For this reason, they are commonly used in quantitative and statistical analyses. To illustrate the use of this method, we can mention a two-part study conducted by Fives and Buehl (2008) which focused on exploring pre- and in-service teachers' beliefs about teaching knowledge and teaching ability. Through analysis of questionnaires, the researchers were able to find that the participants had different beliefs about the knowledge and abilities they would need to teach.

On the other hand, open-ended questions are defined as "items where the actual question is not followed by response options for the respondent to choose from but rather by some blank space (e.g., dotted lines) for the respondent to fill" (Dörnyei, 2010, p. 36). By allowing respondents to answer the questions using their own words, this type of format can provide rich data and elements that might not have been previously anticipated by the researcher. In addition, Vieira-Abrahão (2006) states that this type of questionnaire is usually used to explore participants' personal perceptions, beliefs and opinions and to acquire richer and more detailed answers than those obtained through closed questionnaires.

Thus, among the many questionnaires used by researchers in the literature to identify and study teachers' and pre-service teachers' beliefs, we chose to adopt the one developed by James and Pedder (2006).

2.1.1 James and Pedder's (2006) questionnaire

With the purpose of identifying and comparing their participants' values[18] and practices related to assessment, James and Pedder (2006) created a 30-item questionnaire with three sections[19]. In order to fill out this questionnaire, the participants were asked to provide two types of answers for each of the 30 items using a Likert-type scale (James & Pedder, 2006). On the left side (Scale X), participants were invited to clarify their own assessment practices by choosing whether the specified practices were "never true, rarely true, often true or mostly true" (James & Pedder, 2006, p. 114). On the right-hand column (Scale Y), participants had to express their opinion of how important a given practice was in terms of providing students with learning opportunities (James & Pedder, 2006). The options were: not at all important, of limited importance, important, crucial, or bad practice (James & Pedder, 2006). For the sake of clarity, we have included an illustration of James and Pedder's (2006).

Scale X **This school now** **(About you)**				**Section A** **Teachers' assessment practices**	**Scale Y** **How important are your assessment practices for creating opportunities for students to learn?** **(About your values)**				
Never true	Rarely true	Often true	Mostly true		Not at all important	Of limited importance	Important	Crucial	Bad practice
				I provide guidance to help my students assess their own work.					

Figure 5. James and Pedder's (2006) dual scale format questionnaire (James & Pedder, 2006, p. 114)

This instrument has been validated both by its creators (James & Pedder, 2006) and by Winterbottom et al. (2008). In both studies, the questionnaire was proven to be effective, as it provided researchers with relevant findings, such as gaps between teachers' beliefs and practices. This is one of the main reasons we decided to use their questionnaire as one of our data collection instruments.

[18] James and Pedder (2006) used the term "value" to describe teachers' assessment-related beliefs.
[19] For the purpose of this study, we will only describe section A.

2.1.2 A new questionnaire

In our own study, in order to identify pre-service teachers' beliefs about formative assessment, we decided to adapt[20] James and Pedder's (2006) 30-item questionnaire, more precisely, we transformed the statements found in section A (teachers' assessment practices) into general statements that represented pre-service teachers' beliefs about assessment so that these statements would be adequate to pre-service teachers' practicum reality. In addition, the participants in our study were asked to reply to 30 statements related to assessment by choosing strongly disagree, disagree, undecided, agree, and strongly agree, and to write comments when they felt it was necessary. Finally, we decided to include a new section after each item for our participants to write comments in order to justify their answers (Appendix A). The main reason for adding this section was to identify the possible origins of our participants' beliefs. Then, we piloted our questionnaire with two in-service teachers in order to validate our tool and identify any possible misunderstanding that our participants could have. Moreover, our questionnaires were applied on two different occasions during our data collection phase: the first moment was the beginning of their fourth year (between the months of September and October), in order to identify the pre-service ESL teachers' initial beliefs about formative assessment; and the second occasion was at the end of fourth year (between the months of April and May), with the purpose of verifying whether there were changes in their initial stated beliefs.

2.2 Semi-Structured Interviews

Another common data collection method that is used in the research on beliefs and that we will use in our research is the interview[21]. Fontana and Frey (1994) characterize interviews as "one of the most common and most powerful ways we use to try to understand our fellow human beings" (p. 361). According to Vieira-Abrahão (2006), interviews can be used as a primary tool for data collection or as a source of secondary data, to be triangulated with other data obtained through different tools.

[20] We changed the structure of the statements (subject and verb) from a personal point of view ("I teach" or "I use") to a more neutral point of view ("Teachers should").
[21] For the purpose of this study, the term "interview" is associated only with oral semi-structured interviews.

Nunan (1992) states that interviews can be classified into three types, depending on their level of formality: unstructured, semi-structured and structured. Among these three types, researchers seem to agree that the most effective is the semi-structured interview because of its many advantages. The first one is that semi-structured interviews give the interviewee a certain degree of power and control over the interview, which might give the researcher access to deeper information. Secondly, it is flexible because, when performing a semi-structured interview:

> The interviewer has a general idea of where he or she wants the interview to go, and what should come out of it, but does not enter the interview with a list of predetermined questions. Topics and issues rather than questions determine the course of the interview. (Nunan, 1992, p. 149)

In other words, as Bogdan and Biklen (2007) state, semi-structured interviews help researchers to allow the interviewees to express their thoughts freely.

DeCapua and Wintergerst (2005) also mention other advantages that semi-structured interviews could provide. Semi-structured interviews permit the researcher to focus on a particular topic or topics while allowing flexibility in providing opportunities for two-way communication (DeCapua & Wintergerst, 2005). Furthermore, this type of interview allows the researcher to ask more complex questions, it allows the interviewee to develop their answers, and it allows the researcher and the interviewee to ask for clarifications or explanations when unsure or in need of detail about a certain question or answer (DeCapua & Wintergerst, 2005). Due to this specific advantage, this type of interview is the one usually chosen in studies of beliefs (Barcelos & Kalaja, 2011).

Concerning the potential limitations of semi-structured interviews, Nunan (1992) mentions the asymmetrical relationship between the participants. Since the participants do not have the same rights and power as the interviewer, they could feel inhibited and uncomfortable when it comes to sharing their opinions (Nunan, 1992). Another element that should be considered is the physical positioning of the interviewer and interviewee during the interview. Nunan (1992)

suggests that sitting side-by-side would "convey the message that the interaction is meant to be cooperative rather than confrontational" (p. 152).

To illustrate the use of semi-structured interviews in studies of beliefs, we can mention the work of Abdel Latif (2012) who conducted a study using semi-structured interviews in order to investigate how a standards-based communicative curricular reform in Egypt would change the classroom beliefs and practices of ESL teachers and what factors led to these changes. Through the analysis of the participants' interviews and the use of classroom observations, Abdel Latif (2012) was able to determine five main factors and problems influencing the participants' beliefs and practices (washback, culture of teaching, inadequate time, students' low English levels, and required material). In terms of the efficacy of semi-structured interviews, Abdel Latif (2012) concludes that they can be efficient if used not as a main tool but rather as an additional one to deepen knowledge on a certain topic such as teachers' practices and beliefs.

In terms of our own study, since semi-structured interviews seem to present more benefits, are more commonly used than other types of interviews, and are found to be efficient in studies of beliefs, we decided to choose them as one of our data collection methods. Thus, based on a set of questions inspired by Altet's (2008) and Vanhulle's (2009) professional development models and on Brown's (2004) conceptions of assessments, we conducted semi-structured interviews (Appendix B) with pre-service ESL teachers on two occasions. Firstly, we conducted the semi-structured interviews with our six participants between the months of October and December in order to identify and understand what beliefs and practices related to formative assessment the pre-service ESL teachers bring to their fourth year and their possible origins. Then, at the end of their academic year (between April and May), we completed another session of semi-structured interviews with the goal of studying how pre-service ESL teachers' beliefs and practices related to formative assessment evolved throughout their fourth year and the resulting impacts on the evaluation process.

Each one of these interviews last approximately 25 minutes and were conducted either by the author or by a colleague and were taped and then transcribed. They took place either at the university (lectures' office) or over the phone. To avoid any conflict of interest, the data collection

with the participants whose supervisor was the author was carried out with one of his Ph.D. colleagues. Moreover, since the author was also teaching a fourth-year course in which all his participants were his students, the data analysis phase only began once the course was finished and the grades had been submitted.

Thus, having presented and discussed the benefits and advantages of interviews, we will present in the next sub-section another data collection method that will also have an important role in our study, namely narratives.

2.3 Narratives

Another category of data collection that has been commonly used and proven to be effective in second language teacher research is narratives[22]. Lichtman (2006) defines narratives as "first-person accounts in story form, biography, autobiography, life history, oral history, auto ethnography, pathography, discourse analysis or life narratives" (p. 28). Narratives require researchers to follow several steps:

> collect an objective set of experiences, either chronologically or in life states; gather actual stories; organize stories into pivotal events or epiphanies; search for meaning in the stories; look for larger structures to help explain the meaning in the stories. (Lichtman, 2006, p. 28)

Moreover, Witherell and Noddings (1991) state that these stories are powerful research tools as they:

> [P]rovide us with the picture of real people in real situations, struggling with real problems. They banish the indifference often generated by samples, treatments and faceless subjects. Most important, they invite us to remember that we are in the business

[22] In this study, we use "narratives" and "narrative inquiry" as synonyms.

> of teaching, learning and researching to improve the human condition. Telling and listening to stories can be a powerful sign of regard – of caring – for one another. (p. 280)

Connelly and Clandinin (1990) were among the first to use narratives as a research method in the field of teacher education. According to the authors, narratives are characterized as "the ways humans experience the world" and the main reason for using them in education research is that "humans are storytelling organisms who, individually and socially, lead storied lives" (Connelly & Clandinin, 1990, p. 2). According to Carter (1993), narratives "capture, more than scores or mathematical formulae ever can, the richness and indeterminacy of our experiences as teachers and the complexity of our understandings of what teaching is and how others can be prepared to engage in this profession" (p. 5). Within this conception, education is seen as the construction and reconstruction of personal and social stories where teachers and learners are storytellers and characters in each other's stories (Connelly & Clandinin, 1990).

Furthermore, Golombek and Johnson (2004) state that the production of narratives in second language research allows teachers to "try to interpret a series of experiences, to reconcile what is known with that which is hidden, and to construct and reconstruct understandings of themselves as teachers and of their teaching with an eye to the future" (p. 308). In addition, Duff and Bell (2002) state that narratives are powerful constructions that can function either as instruments of social control or as valuable teaching tools. For those reasons, the use of narratives has become a predominant way of understating what teachers know, what they do with what they know, and the sociocultural contexts in which they teach and learn to teach (Golombek & Johnson, 2004). Therefore, using narratives will not only help us understand how pre-service ESL teachers' beliefs and practices related to formative assessment evolve, but also see how they perceive the assessment process.

Among the limitations narratives might have, Melzi and Caspe (2007) point out that narrative research involves "labor-intensive procedures for collecting, coding, scoring, and analyzing data" (p. 159). In addition, Bell and Pavlenko (2002) mention that because they are so time-consuming, narrative inquiries are not appropriate for research involving many participants.

And finally, subjectivity might be a problem, given that making meaning of participant stories relies on the researcher's interpretation (Bell & Pavlenko, 2002).

Concerning the use of narratives in studies of beliefs, we can cite the study of Vieira-Abrahão (2004) who used them with the purpose of mapping the beliefs that student teachers brought with them to their teacher education programme, as well as their possible origins. Belam (2004) likewise used narratives to understand the evaluative beliefs held by both students and an English professor at a private university in Brazil.

More recently, Pu (2012) conducted a narrative-based study to investigate how pre-service ESL teachers think, know and believe when it comes to teaching English learners. In this study, narratives were examined with the purpose of gaining insights into the pre-service teachers' formulation of key elements in teaching English learners. In addition, through their selection of events chosen to be retold in the narratives, Pu (2012) expected to investigate how their identities and views evolved. Pu concludes that narratives "can help pre-service teachers to articulate and synthesize their learning, internalize their experiential understandings of teaching English learners emotionally and cognitively, and externalize their experiences on the pathway to becoming classroom teachers" (Pu, 2012, p. 12).

Furthermore, given the fact that narratives are a successful data collection tool in both belief-related studies and second language teacher studies, the use of narratives in our research had the purpose of identifying potential hidden evaluative beliefs and practices as well as their possible origins. Thus, during their practicum, we asked the participants to describe (narrate) a moment when they formatively assessed their pupils during their practicum, how they felt about it, and any other details they might wish to include (Appendix D). Although our participants were supposed to produce written narratives, two of them had to be audio-recorded over the phone and later transcribed due to our participants' lack of time. Moreover, through the selection of the events chosen to be retold in the narratives[23], we were not only able to identify their beliefs and practices, but also to understand their perspectives and how they justify their teaching approach.

[23] The length of their narratives were approximately 2 pages long.

In the next section, we will present another data collection method that will have an important role in identifying pre-service ESL teachers' beliefs and practices related to evaluation, namely stimulated recall.

2.4 Stimulated Recall

Nunan (1992) defines stimulated recall as the "technique in which the researcher records and transcribes parts of a lesson and then gets the teacher to comment on what was happening at the time that the teaching and learning took place" (p. 94). Among its advantages, besides providing understandings of the teaching and learning process that would be difficult to capture using other tools, stimulated recall "enables teachers and students as well as the researcher to present their various interpretations of what is going on in the classroom, and for these interpretations to be linked explicitly to the points in the lesson which gave rise to them" (Nunan, 1992, p. 94). Another advantage is that it provides data from real-life contexts (Fox-Turnbull, 2011).

Among the limitations stimulated recall could have, Calderhead (1981) cites the limited extent to which participants recall and report their thoughts. For many participants, watching their own lessons is a stressful and anxiety-inducing experience, a fact that could influence their recall. For instance, the choice of the excerpts (teaching moments) could influence the quality of the data since "each individual perceives a unique set of visual cues which may or may not be recorded by the researchers" or "teachers viewing videotapes of their lessons are perceiving the lesson again and from a different perspective and tend to be distracted, at least initially, by their own physical characteristics" (Calderhead, 1981, p. 213).

As regards the use of stimulated recall in research on beliefs, Vieira-Abrahão (2006) highlights the importance of this instrument by stating that it could "enable the awareness of some aspects rarely considered by the participant, bringing him or her professional growth, and offering the researcher with interesting data that could help understand the practices observed[24]" (p. 228).

[24] Author's translation.

This advantage is one of the main reasons the use of stimulated recalls has increased in studies about beliefs.

In terms of the use of stimulated recall as a data collection tool within research on formative assessment practices, Thomas et al., (2011) performed a study in Quebec that illustrates its efficacy. These researchers conducted a longitudinal study with the purpose of investigating how 13 experienced elementary school teachers adapted their evaluation approach from a focus on the product of learning activities with the purpose of assigning a final grade, to a focus on the learning process and with the purpose of assessment for learning using the formative assessment tools required by the MEES.

Thomas et al. (2011) claim that stimulated recall interviews gave access to non-observable teacher practices and other elements such as "the mental and observable actions linked to teaching and formative evaluation", "the knowledge on which the teachers based their actions", "the goals of the activity", and "the recall of the activity: the reflective look at the activity (facts, realizations, questions), and any information about what the teacher might want to do differently the next time" (Thomas et al., 2011, p. 389). As for our specific research, similar to Thomas et al.'s (2011) findings, through the use of this data collection tool, we were expecting to be able to identify pre-service ESL teachers' mental actions, the goals of their formative assessment activities, and what they would have done differently.

In order to do so, we asked our participants to film themselves during a moment in which they would formatively assess their students. Once the video was recorded, we asked our participants to send it to us and schedule a meeting to talk about it. Since the time chosen for the interview would not happen immediately after the video was recorded, we asked our participants to watch it again before meeting with us. During our sessions, we asked our participants questions to justify their assessment practices in order to better understand them. These sessions took place between the months of March and April.

In addition, the stimulated recall sessions were audio-recorded so that transcriptions can be made and analyzed later on. Through their comments and justifications, we identified and

explored not only the nature of their beliefs and practices related to formative assessment, but also their possible origins and how they evolved throughout their last year of the programme. In the next section we will present how we intended to proceed with the data analysis process in order to answer our research question and sub-questions.

3. DATA ANALYSIS PROCEDURE

In order to identify how pre-service ESL teachers' beliefs and practices related to formative assessment evolve throughout their fourth year, we divided the data collection phase into three blocks: in the first block, we identified pre-service teachers' beliefs about formative assessment at the beginning of their fourth year and their possible origins; in the second block, we identified pre-service ESL teachers' beliefs and practices related to formative assessment during the practicum; and in the third block, we identified the pre-service ESL teachers' beliefs at the end of their teacher education programme. The choice of this approach is justified by Barcelos (2006), who states that several studies have shown that teachers' beliefs are inconsistent with their practices.

Furthermore, to ensure the validity of the research and to obtain concise, reliable and rich results, we triangulated the data obtained through each data collection instrument in order to confirm the participants' beliefs and practices. For instance, in order to determine pre-service ESL teachers' beliefs about formative assessment at the beginning of their fourth year, we compared the information found through their questionnaire with the data acquired through their semi-structured interviews. According to Freeman (1998), the advantages of this process include the fact that it helps to "build stability and confidence in how you interpret your data and thus in what you find; and it illuminates problems and anomalies, and thus raises new questions to pursue" (p. 98).

3.1 Beginning of Fourth Year

In order to identify pre-service ESL teachers' beliefs about formative assessment at the beginning of their fourth year, we used our version of James and Pedder's (2006) questionnaire

(Appendix A) and conducted semi-structured interviews (Appendix B) with our 6 participants to validate our findings.

3.1.1 Questionnaires

In order to analyze the data collected from the questionnaires, we followed the data analysis procedure suggested by Dörnyei (2010). Open-ended questionnaires should "be processed by means of some systematic '*content analysis*', whereby the pool of diverse responses is reduced to a handful of key issues in a reliable manner" (Dörnyei, 2010, p. 117). Furthermore, Dörnyei (2010) states that this process requires two phases: 1) "Taking each person's response in turn and marking in them any distinct content elements, substantive statements, or key points" and 2) "based on the ideas and concepts highlighted in the texts (cf. Phase 1), forming broader categories to describe the content of the response in a way that allows for comparisons with other responses" (p. 117). Moreover, based on James and Pedder' (2006) study and Brown's (2004) conceptions of assessment, we grouped our 30 items into the same three categories that James and Pedder (2006) used in their study, based on three different approaches and goals for the assessments used by teachers in class: assessment as a tool to make learning explicit; assessment as a way to promote autonomy; and assessment so as to provide performance orientation (James & Pedder, 2006). The tables provided in chapter four permit a visualization and analysis of our participants' answers, in which the value 1 represents "Strongly disagree", the value 2 represents "Disagree", the value 3 represents "Undecided", the value 4 "Agree" and the value 5 "Strongly agree" (see Appendix 1). These categories that helped us create statements that illustrate/represent the participants' beliefs related to formative assessment at the beginning of their fourth year so that they could be easily compared with other collected data.

3.1.2 Semi-structured interviews

In order to analyze the semi-structured interviews, as suggested by many authors (Bogdan & Bikley, 2007; Lichman, 2006; Wiersma, 1995), we chose code words, phrases or other textual elements from the data collected based on the participants' answers that represented their evaluation-related beliefs and practices. According to Wiersma (1995), this process is known as

coding and it is defined as the way researchers organize and sort their collected data. In order to establish each coding, we followed Bogdan and Bikley's (2007) steps: "you search through your data for regularities and patterns as well as for topics your data cover, and then you write down words and phrases to represent these topics and patterns" (p. 173).

Therefore, once the coding process was done and the regularities and patterns in the participants' beliefs were identified, we created statements that represent them. In addition, through the analysis of our semi-structured interviews, we identified our participants' professional development paradigms and approach to practicum based on Altet's (2008) and Vanhulle's (2009) models. Then, in order to validate our findings, we compared these representative statements with the data previously collected from the questionnaire to see if they match, so as to corroborate the evaluation-related beliefs and practices that teacher candidates bring to the beginning of their fourth year.

3.2 While on Practicum

While the participants were on practicum, in order to study how their beliefs and practices related to formative assessment manifest in practice, we used two data collection methods: narratives and stimulated recall sessions.

3.2.1 Narratives

Consistent with the suggestions of Lal, Suto and Ungar (2012), in order to analyze the participants' narratives, we looked for plotlines, details of the setting, characters, and actions. By following this procedure, we adopted Clandinin and Connelly's (2000) suggestion of a three-dimensional analysis approach. These three dimensions are "personal and social (interaction); past, present, and future (continuity); combined with the notion of place (situation)" (Clandinin & Connelly, 2000, p. 50). In addition to these dimensions, one should also consider the four directions that they follow: inward (a person's internal conditions), outward (the person's environment), and backward and forward, in other words, the time of the events, whether in the past, present or future (Clandinin & Connelly, 2000).

Therefore, in our analysis we considered the participants' personal and social characteristics (how they described their in-class interactions with the students and other teaching staff); their acquired knowledge in relation to past and present experiences and what they still needed to learn in the future concerning their assessment practices; and, finally, the context of their teaching environment (needs and particularities).

3.2.2 Stimulated recall sessions

To analyze the audio-transcriptions produced based on the data collected from the stimulated recall sessions, we adopted the same coding procedure previously mentioned. Moreover, we looked for recurrent themes and topics related to the pre-services ESL teachers' beliefs and practices related to formative assessment and created statements that illustrate them. Then, we compared the results with the participants' beliefs and practices previously identified through the other data collection methods (triangulation), in order to verify whether there were any changes in the participants' beliefs and practices while on practicum.

3.3 End of Fourth Year

In order to identify the state of pre-service ESL teachers' beliefs and practices at the end of their teacher education programme and how they evolved, once again, we collected data using open-ended questionnaires and semi-structured interviews.

3.3.1 Questionnaires

Concerning the procedure that was followed to analyze the second round of questionnaires, we repeated the same data analysis process that was used in the first session. Moreover, after creating statements that represented pre-service ESL teachers' beliefs about formative assessment, we compared this information with the data previously collected in order to verify the presence of and possible justifications for any changes observed.

3.3.2 Semi-structured interviews

In order to analyze the data collected from the second session of interviews, we followed the same coding analysis procedure previously described and suggested. Furthermore, based on the findings obtained from this tool and once again by triangulating it with previous collected data, we sought further information on how pre-service ESL teachers' beliefs and practices related to formative assessment evolved throughout the last year and the possible origins of these changes.

In conclusion, through the use of different data collection tools we obtained relevant findings to the field of teacher education and pre-service teachers' understanding of formative assessment. Using a variety of data collection tools also permitted rich, distinct data that showed different aspects of pre-service teachers' beliefs and practices. In addition, collecting our data in three phases also allowed us to have an overview of pre-service teachers understanding over the entire final year. Each of the different data collection tools provided different strengths and were complementary. For instance, during the semi-structured interviews the participants could justify the responses they had given on their questionnaires. When they completed the final questionnaires, since they were at their homes, they had time to reflect and describe events and experiences lived during their fourth-year of teacher education programme. Finally, although there was a huge amount data collected, which presented challenges for our analysis, the use of professional development models that were relevant, pertinent and context-adapted represented an opportunity to examine beliefs from a variety of different angles and to validate responses. Tables 3 and 4 illustrate our data collection tools and data analysis procedure.

Phases	Data Collection Tool	When	Content of the tool	Goals
Phase 1	Questionnaires	At the beginning of their fourth year	Tool created based on James and Pedder's (2006) 30-item questionnaire	Identify pre-service ESL teachers' beliefs related to formative assessment based on Brown's (2004) conception of assessment
	Semi-structured interviews	At the beginning of their fourth year	Question participants on their perceptions of the role of teaching methods courses, formal evaluation course, and practicum experiences on their professional development	Identify pre-service ESL teachers' beliefs and practices related to formative assessment (Fives & Buhel, 2012; Cowie & Bell, 1999) Identify pre-service ESL teachers' professional development paradigm and approach to practicum (Altet, 2008; Vanhulle, 2009a)

Phase 2	Narrative	During their practicum	Participants were asked to describe (narrate) a moment when they formatively assessed their pupils during their practicum, how they felt about it, and any other details they might wish to include	Identify potentially hidden evaluative beliefs and practices as well as their possible origins using Clandinin and Connelly's (2000) model
	Stimulated Recall	During their practicum	Discuss the participants' formative assessment practices while on practicum in order to understand the sources of these practices.	Identify and explore the nature and possible origins of pre-service teachers' beliefs and practices related to formative assessment (Fives & Buhel, 2012; Cowie & Bell, 1999)
Phase 3	Questionnaires	At the end of their fourth year	Verify with the participants whether the answers they had provided at on their first questionnaire had changed. The participants also had to justify their answers	Identify pre-service teachers' beliefs related to formative assessment (Brown, 2004) Identify if there were changes to pre-service ESL teachers' beliefs related to formative assessment based on Brown's

				(2004) conception of assessment
	Semi-structured interviews	At the end of their fourth year	Question participants on what they had learned in terms of formative assessment during fourth year of teacher education	Identify pre-service ESL teachers' beliefs and practices related to formative assessment at the end of their fourth year (Fives & Buhel, 2012; Cowie & Bell, 1999) Identify changes to pre-service ESL teachers' professional development paradigm and approach to practicum (Altet, 2008; Vanhulle, 2009a)

Table 3: *Data collection tools and goals*.

Phase	Data Collection Tool	Data analysis procedure	Procedure 2
Phase 1	Questionnaires	Form categories based on James and Pedder' (2006) study and Brown's (2004) conceptions of assessment	Create statements that illustrate/represent the participants' beliefs related to formative assessment at the beginning of their fourth year Compared these statements with other collected data
	Semi-structured interviews	Identify code words, phrases or other textual elements that represent pre-service ESL teachers' evaluation-related beliefs and practices (Bogdan & Bikley, 2007; Lichman, 2006; Wiersma, 1995)	Identify our participants' professional development paradigms and approach to practicum based on Altet's (2008) and Vanhulle's (2009a) models Compare these statements with the data collected from the questionnaire
Phase 2	Narrative	Classify our participants' statements into Clandinin and Connelly's (2000) three-dimensional analysis approach	Analyse how our participants described their in-class interactions with the students and other teaching staff Identify pre-service ESL teachers acquired knowledge in relation to past and present experiences and what they still needed to learn in the future concerning their assessment practices Study how pre-service ESL teachers' teaching context impacted their beliefs and practices

			related to formative assessment
	Stimulated Recall	Create statements that illustrate pre-services ESL teachers' beliefs and practices related to formative assessment and them (Bogdan & Bikley, 2007; Lichman, 2006; Wiersma, 1995)	Identify pre-service ESL teachers' beliefs and practices related to practicum while on practicum Verify whether there were changes in the participants' beliefs and practices while on practicum
Phase 3	Questionnaires	Create statements that represent pre-service ESL teachers' beliefs related to formative assessment	Identify pre-service ESL teachers' beliefs at the end of their fourth year Verify the presence of and possible justifications for any changes observed.

	Semi-structured interviews	Identify words, phrases or other textual elements that represent pre-service ESL teachers' evaluation-related beliefs and practices (Bogdan & Bikley, 2007; Lichman, 2006; Wiersma, 1995)	Identify pre-service ESL teachers' beliefs and practices related to assessment at the end of their fourth year Sought further information on how pre-service ESL teachers' beliefs and practices related to formative assessment evolved throughout the last year and the possible origins of these changes

Table 4: *Data analysis procedure and goals*

In the next chapter, we will present our results obtained from all the instruments used to collect data during the three different data collection phases, which were extremely important in terms of answering our research question.

CHAPTER 4 – RESULTS

1. RESULTS

In this fourth chapter, we will now present the results found through our data collection. In order to do so, we divided this chapter into three main sections. In the first section, we will present our findings obtained through the analysis of our initial questionnaire and the first semi-structured interview. As previously mentioned, the goal of this part of the study was to identify pre-service teachers' beliefs related to formative assessment at the beginning of their fourth year of study and the possible origins of these beliefs. In the second part of this chapter, we will present our findings based on the analysis of our participants' narratives and stimulated recall sessions, which were recorded during the time they were on their final practicum placements. These tools were used to identify our participants' beliefs and practices related to formative assessment during the practicum. Finally, in the third section of this chapter, we will identify our participants' beliefs and practices related to formative assessment identified at the end of their teacher education programme based on our second questionnaire and final semi-structured interview.

1.1 Pre-service ESL Teachers' Initial Beliefs related to Formative Assessment

As previously discussed, in order to find how pre-service ESL teachers' beliefs and practices related to formative assessment evolved during their fourth year (and which elements could influence them), it was important to first identify their initial beliefs at the beginning of their year. Thus, we collected data using two main tools: a questionnaire and a semi-structured interview.

1.1.1 Initial questionnaire.

As previously mentioned in our own study, in order to identify pre-service teachers' beliefs about formative assessment, we decided to adapt James and Pedder's (2006) 30-item questionnaire and include a new section after each item for our participants to write comments in

order to justify their answers (Appendix A). The goal of using James and Pedder's (2006) questionnaire in our study was not only to help us identify pre-service teachers' beliefs related to formative assessments but also to identify their conceptions of the purposes of assessment to find out how these elements interacted with each other and how they evolved throughout the last year of the pre-service teachers' education programme. In addition, James and Pedder's (2006) questionnaire also helped to identify relevant findings, such as the gaps between teachers' beliefs and their practices.

1.1.1.1 Assessment as a tool to make learning explicit

James and Pedder (2006) grouped eleven items out of their 30 items as they contained statements that focused on practices that promoted assessment as a tool to make learning explicit. More specifically, they targeted assessment as a way of: (a) using evidence of learning to influence planning (item 1); (b) encouraging discussion, including the clarifying of learning objectives, lesson purposes and success criteria (items 11, 21, 25 and 28); (c) open questioning (item 18); (d) providing formative feedback to respond to evidence of learning and encourage pupil involvement in learning (items 4, 10, 20 and 22); and (e) students' effort should be seen as important (item 27). This subgrouping was also important to help us compare our participants' beliefs with their assessment practices related to formative assessment. As we can see in the Tables 3 and 4, the participants believe that assessment should be used a tool to elicit students' understanding and thus, serve as a base to plan the following lessons as they seem to either agree or strongly agree with the majority of the items that focused on practices that promoted assessment as a tool to make learning explicit.

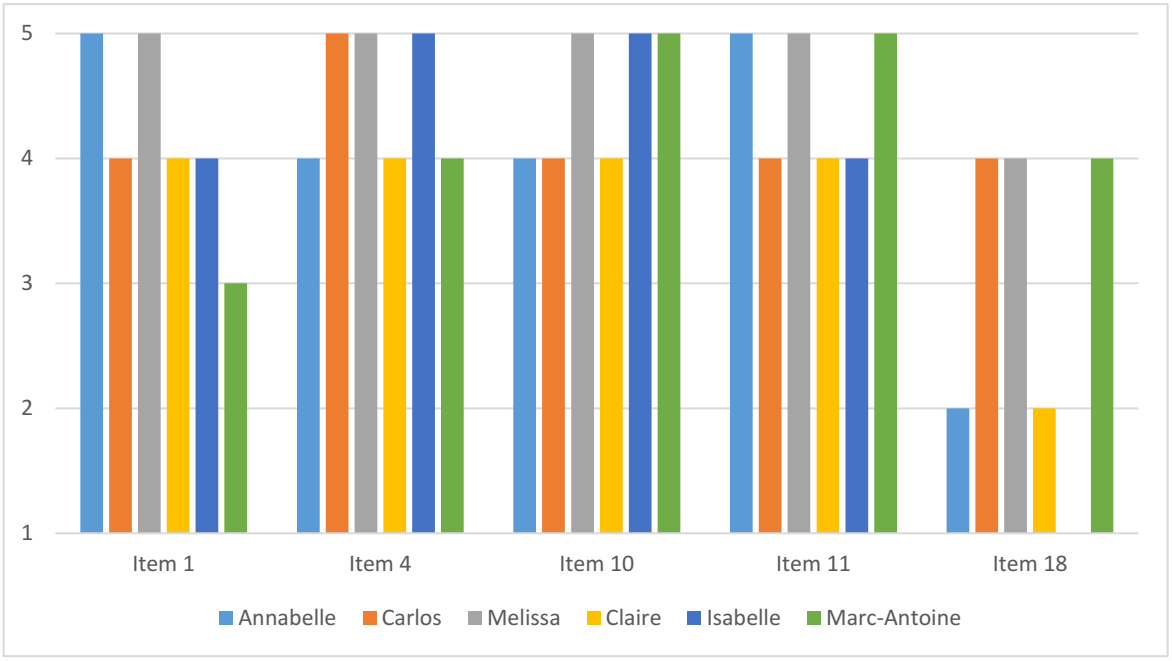

Table 5. *Category 1 – Assessment as a tool to make learning explicit (items 1, 4, 10, 11 and 18)*

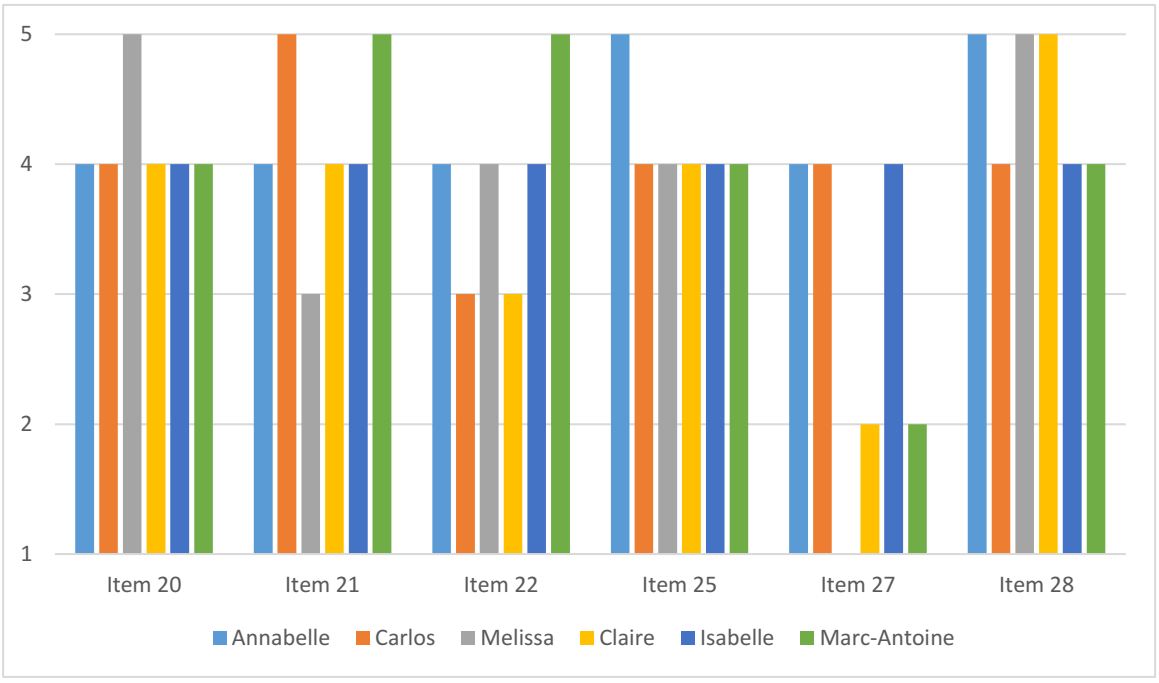

Table 6. *Category 1 – Assessment as a tool to make learning explicit (items 20, 21, 22, 25, 27 and 28)*

In Item 1, participants were asked if assessments provide teachers with useful evidence of students' understanding, and 5 of the 6 of our participants seem to either agree or strongly agree with this statement. Among their justifications, they stated that when building lesson plans, teachers should know what students need to learn and that assessments could tell them what they need to focus on (Claire). Another justification given by Isabelle was that if a student left a blank page, it would mean that the teaching (such as the instructions or explanation for the activity) was not quite clear for students. Although only one participant (Marc-Antoine) marked undecided, in his comment he justified that he does believe that assessments could be a good way of seeing if students have understood the content of a lesson.

Item 4 questioned whether the feedback students receive should help them improve, three of the participants agreed and three strongly agreed with this matter. In terms of their comments, two participants mentioned that providing feedback is "the only way" for the students to improve their learning (Carlos and Melissa). They also mentioned that the feedback provided by the teacher could serve as an encouragement tool (Melissa), although it might not be always effective (Annabelle). Other responses include a way of going back over (reviewing) with the students what was not understood and what needed to be to re-explained, and a way of "making students progress" (Marc-Antoine).

When asked if students should be told how well they have done in relation to their previous performances, which was item 10, once again three participants agreed and three participants strongly agreed. Among their answers, we found that they believe that it is important for students to know if they are making progress (or not) and why (Annabelle) and telling students how well they did is a way for students to know where they stand (Carlos). Moreover, three participants mentioned that this could be a way of encouraging them (Claire, Annabelle and Marc-Antoine).

The next item classified as category 1 was item 11. In this item, the participants were asked whether or not the learning objectives for students should be discussed with students in ways they understand. All participants answered that they either agreed or strongly agreed with this statement. Among their justifications, we found that such an approach is a way of involving

students in their own success (Mélissa) and provides them with strategies (Marc-Antoine), helps them better understand what is being assessed (Carlos) and is a way of making sure that the teacher's expectations are met (Isabelle).

The 18th item asked the participants if questioning is best way for teachers to elicit reasons and explanations from their students, and the results are mixed. Three of the six participants answered that they agreed with this statement, whereas two disagreed and one did not answer. Among the justifications, Annabelle that stated that: "students should be able to express reasons and explanations, but sometimes it is important to know factual information." Others mentioned that this could be a good strategy among other methods (Mélissa), that "this could help students realise by themselves" (Carlos), and that this approach should be used "also to elicit motivation, questioning, and interest. Questioning the students is to me a teaching strategy that can much more than the simple fact of questioning" (Claire).

Item 20 asked the participants if students' errors should be valued for the insights they reveal about how students are thinking. This time, all of our participants seem to agree (5 of the 6) or strongly agree (1 participant). The participants justified their answers by saying that: students' mistakes help teachers to know what was understood and what was not (Annabelle), which would lead to teachers trying other ways of explaining or teaching (Isabelle); and that mistakes allow teachers "to try and see what goes on in the mind of the students when they produce errors" (Claire).

Item 21 focused on whether students should be helped to understand the learning purposes of each lesson or series of lessons. The majority of our participants (5 of the 6) seem to either agree (3 participants) or strongly agree (2 participant) with this statement, whereas only one participant remained undecided. Among some of their justifications, the participants mentioned that "this is the only way to learn" (Carlos), this approach could increase students' motivation (Marc-Antoine), "students should know the reasons why they are doing specific activities. It may help you as a teacher to identify the real purposes of your lessons as well" (Annabelle). Mélissa, who was the one who marked undecided in the answer, wondered if students would be able to understand the teacher's learning goals (depending on their level) or if it would be too much for them to handle.

The next item in the questionnaire that also fits in the first category (making learning explicit) was item 22. In this item, participants were asked about whether the assessment of students' work should be mainly in the form of comments. Once again, the majority of the participants seem to either agree (3 of the 6) or strongly agree (1 participant) with this statement. Two participants marked undecided. Some of their justifications were that grades and marks do not really help students to understand what they have to improve (Annabelle) whereas comments and concrete feedback do (Isabelle and Marc-Antoine), and that comments are more personal and can target more easily what students need to work on (Mélissa). The students that marked undecided justified their answers by saying that both grades and comments should be used (Carlos) and that assessments can be done in many forms as long as they have the purpose of helping guiding students in the right direction (Claire).

For item 25, the participants were asked their opinion about whether the main emphasis in teachers' assessment should be on what students know, understand and can do. All participants agree with this statement as they marked either agree (5) or strongly agree (1). Among their justifications, we can cite: "assessments evaluate learning, and learning is what you know, what you understand, and what you can do" (Annabelle); "that is the only way to make it just" (Carlos); "teachers do not want to discourage his (sic) students by inserting knowledge they have never seen before" (Isabelle); and "otherwise the assessment is not relevant" (Marc-Antoine).

When asked if student effort should be seen as important when assessing their learning, which was item 27, the majority of the participants answered that they disagree with such statement as four of them marked disagree whereas two answered that they agree. The ones that agree justified by that "it is difficult to measure effort" (Annabelle); and that "students could give lots of effort but not know their stuff effort does not mean knowing the content" (Carlos). In terms of the participants who disagree, their justification were the following: "effort is valuable and can most times be a game changer when in a pass or fail situation" (Mélissa); "the effort should be showed by the students" (Claire); "effort is an important element in the learning of someone" (Isabelle); "if you know your students then you are going to be able to see if they put efforts or not on an assessment" (Marc-Antoine).

The last item related to the topic of assessments as tools to make learning explicit was item 28. For this statement, participants had to share their view on whether assessment criteria should be discussed with students in ways they understand. Once again, all participants seem to agree with the statement as they either marked agree (3 participants) or strongly agree (3 participants). Justifications included: that is how students will understand what is happening (Carlos); there is no point in assessing if students do not understand it (Claire), and teachers should provide a grid that students are able to understand (Mélissa and Isabelle) and know exactly how they will be assessed (Marc-Antoine). Overall, the results indicate that the participants agree that assessment is linked to student learning.

1.1.1.2 Assessment as a tool to promote learning autonomy.

Among the 30 items included in James and Pedder's (2006) questionnaire, twelve focused on assessment as a tool to promote learning autonomy. These items were placed into this category as they highlighted the importance of also making students responsible for their own learning. They can be subdivided by more precise assessment goals: (a) students' assessments of their own and each other's work (items 13, 19, 24 and 29); (b) assessment as a tool to develop independence in learning (item 9); (c) assessment as a tool to make students engage with mistakes and problems found in their own work (items 15, 16 and 25); (d) assessments that should build on their strengths (items 14 and 26); and (e) students should be encouraged to critically think about their learning (items 17 and 30). As we can see in the Tables 5 and 6, once again, the majority of our participants believe assessments should be used as tools for promoting students' autonomy since the majority of them seem to either agree or strongly agree with the items within this category that focused on assessments as means to promote students' autonomy.

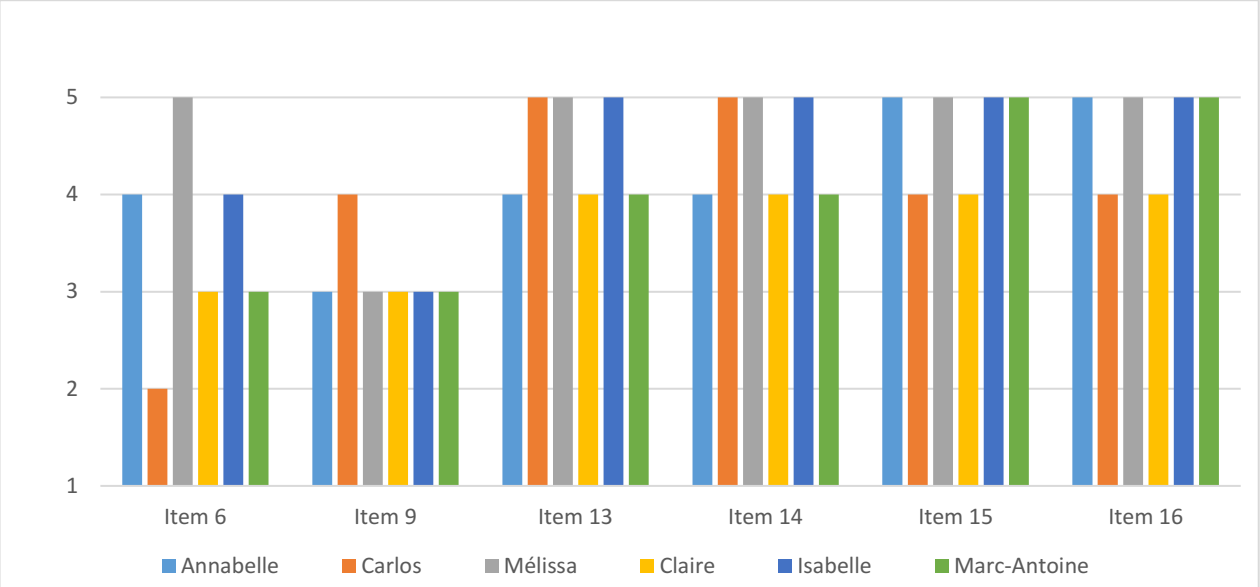

Table 7. *Category 2 – Assessment as a tool to promote learning autonomy (items 6, 9, 13, 14, 15 and 16)*

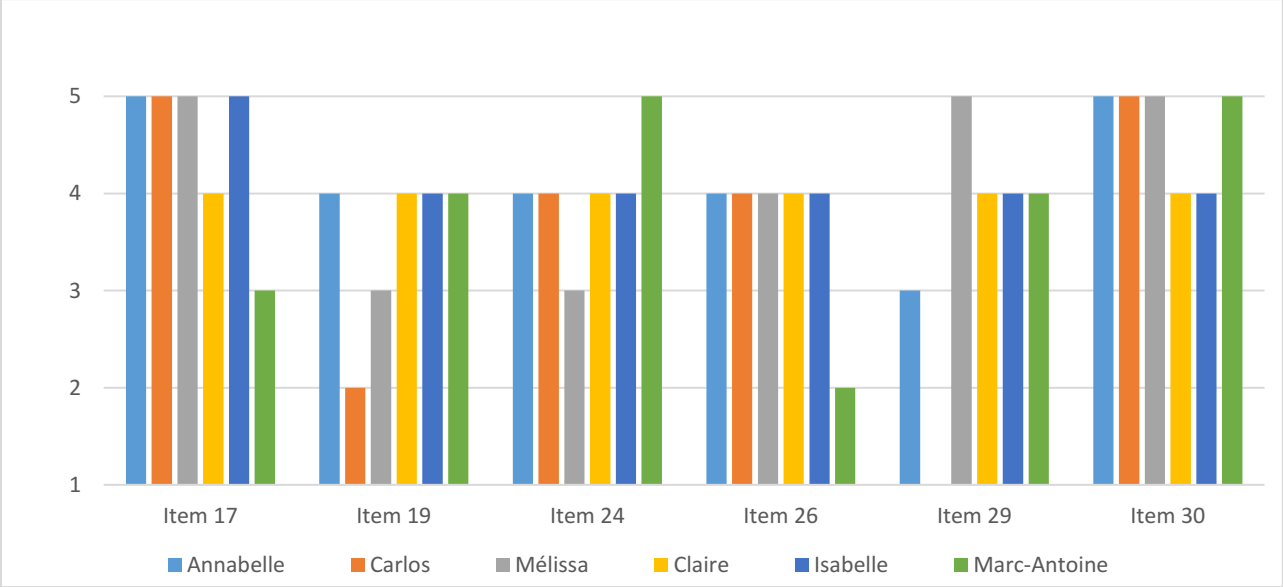

Table 8. *Category 2 – Assessment as a tool to promote learning autonomy (items 17, 19, 24, 26, 29 and 30)*

The first statement that focused on assessment as a tool to improve autonomy was item 6. In this item, participants were asked if students should be given opportunities to decide their own learning objectives. For this item, we had mixed results as the participants' answered varied between strongly agree (1 participant), agree (2 participants), undecided (2 participants) and

disagree (1 participant). Among the justifications, the participants that agreed (or strongly agreed) mentioned that there is "no better way than having the student involved in his learning and his success" (Mélissa), "students have a right to be involved in their learning objectives" (Isabelle), and that the objectives are personal (Annabelle). The participants that marked either undecided or disagree justified their answers by saying that the "objectives should be selected by a trained professional" (Carlos), "to a certain extent yes, but keep in mind the curriculum" (Claire) and that "I am not sure that students are able to identify their learning objectives" (Marc-Antoine).

Item 9 focused on whether teachers' assessment practices help students to learn independently. This time, the majority of our participants marked undecided (4 of the 6). Their justification corroborated their choices as many of them answered that they did not know if there was "a relation between learning independently and assessment practices" (Annabelle), "I am not sure that students learn independently because the practices are there to guide them and help them complete the final assessment" (Marc-Antoine), or as Isabelle stated:

> I am not certain what to answer for this statement. Teachers assess students to see if they understand the elements taught in class. Of course, when you assess, you want students to learn to remember the knowledge they acquired during class so it is pushing them to learn independently.

The participant that agreed, Carlos, justified his answer by saying that this approach would "help students understand what they do not know."

Item 13 focused on whether teachers should provide guidance to help students assess their own work. As a result, the majority of the participants seem to agree with this statement as they all answered either agree (3 participants) or strongly agree (3 participants). Three of the participants highlighted the importance of this approach by justifying that teachers should guide students at all times (Annabelle) so as to "take them another level" (Marc-Antoine), and that "teachers have to give help to their students in order for them to be able to assess their own work to see what they did well or what they did not quite understand" (Isabelle).

When asked if teachers should identify students' strengths and advise them on how to develop these further in item 14, participants seem to be in favour of this approach as three of them marked that they agreed and three marked that they strongly agree. In terms of their justification, three of them mentioned the importance of not only focusing on the students' weaknesses but also their strengths as this could give them confidence "to develop and go beyond their limits" (Isabelle), and that teachers should start from the students' strengths and build from that (Claire) or they may want to "teach students how to use their strengths efficiently" (Annabelle).

For the item 15, in which we questioned whether students should be helped to find ways of addressing problems they have in their learning, all participants seem to favour it as four of them strongly agreed and two agreed. According to the participants, teachers should: help students who are struggling (Isabelle) as they (the students) cannot do it on their own (Annabelle); help students but also teach them how to express themselves/be independent (Carlos); help students by supporting and guiding them towards what could help them the best (Claire).

The 16th item focused on whether students should be encouraged to view mistakes as valuable learning opportunities. Four of the six participants answered that they strongly agree and two answered that they agreed. Among their justifications, some of the participants mentioned the difficulty of making students understand that making mistakes is something normal as it is part of learning (Annabelle, Isabelle and Marc-Antoine) especially when students are being graded with marks as students tend to only focus on getting a good grade (Carlos).

When asked if students should be helped to think about how they learn best, which was item 17, four of the six participants marked that they strongly agreed, one marked agreed and one undecided. The participants justified their answers by saying that: students would learn more independently if they were made aware of how they learned best (Annabelle); depending on their age level, students would appreciate being guided by having the best strategies to learn efficiently (Mélissa); and it is by talking to students that teachers will find how they learn best (Marc-Antoine).

Item 19 questioned whether teachers should provide guidance to help students assess one another's work. Four of the six participants answered that they agree with this statement whereas one marked undecided and one disagrees. In their justifications, we can also see that the majority of the participants seem to favour this practice. On the other hand, Carlos (who was the only participant who did not agree with the statement) does not believe that students should be given such responsibility as students were not trained to assess each other's work.

In item 24, which focused on whether teachers should provide guidance to help students assess their own learning, the majority of the participants seem to be in favour as five of six participants answered either agree (4) or strongly agree (1) and only one participant answered undecided.

The 26th item asked the participants whether students should be helped to plan the next steps in their learning and once again, the majority of them seem to be in favour. Five of the six participants answered that they agree and only one participant answered disagree. For instance, according to Claire, "when it comes to learning, teachers should always think about what is next and help students to do the same" (Claire). Carlos believes that through this approach, students can focus on their learning. The only participant who marked "disagree" justified that "this is the teacher's job and that students do not know enough of the programme to plan the next steps in their learning" (Marc-Antoine).

Item 29 asked if students should be given opportunities to assess one another's work, and the participants' answers varied between strongly agree (1 participant), agree (3 participants), undecided (1 participant) and strongly disagree (1 participant). Although the majority of our participants seem to favor this approach, Carlos was the only one who does not agree with it as he believes that students are not trained to do so.

The last item that focused on student autonomy as one of the assessment practices was item 30. This item focused on whether teachers should regularly discuss with students' ways of improving learning/how to learn and all participants seem to agree with it as four participants answered agree and two answered strongly agree.

1.1.1.3 Assessment as a way of measuring performance goals

The last category of items found in the questionnaire created by James and Pedder (2006) has assessments as a way of measuring performance goals. In this category, the authors classified 7 items that can be subdivided as the following assessment practices: (a) curriculum orientated planning (items 2, 3, 23); (b) the development of a competitive classroom and a strong focus on performance orientation (item 5); (c) closed questioning (item 7); (d) the importance of the individual teacher (item 8); (e) and providing summative feedback, such as marks and grades (item 12). As we can see in the Table 9, the majority of the participants seem to disagree (or strongly disagree) with the majority of the statements related to this category, which means that they do not believe assessments should be seen as a way to measure performance goals.

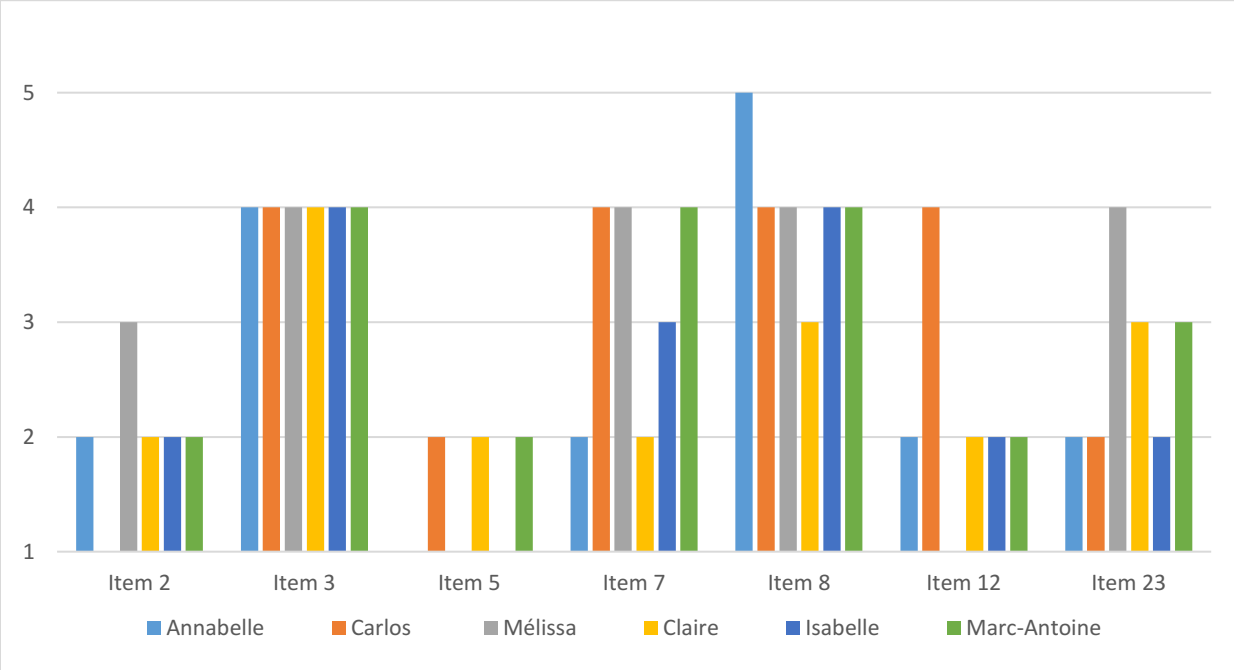

Table 9: *Category 3 – Assessment as a way of measuring performance goals*

The first item in which assessment is seen as a way of measuring performance goals was item 2. In this item, participants were asked if the next lessons should be determined more by the prescribed curriculum than by how well students did in the last lesson, and the majority of our participants either disagreed (4) or strongly disagreed (1) and one participant answered undecided.

Five of the six participants highlighted the importance of not moving forward in the content (move on to the next lesson) before being sure that students are ready. Mélissa, who was the participant who was undecided, justified that it is:

> … hard to say if the next lesson will be based on the curriculum rather than how well [students performed] because it is a good thing to give back to students. However, when teachers need to go through many different types of evaluations, when the material is understood, the teacher will often go to the next field that needs to be covered. Is this a good thing? I wouldn't be so sure about it.

The 3rd item asked participants if the main emphasis in assessments should be on whether students know, understand or can do prescribed elements of the curriculum. All of the participants marked that they agree with this statement. Although all the participants stated that they agree with this statement, two of them mentioned in their justification that teachers should also adapt their teaching if they consider something is more important (Marc-Antoine) or cover many other contents (Annabelle).

Item 5 focused on whether students should be told how well they have done in relation to others in the class, and all the participants either disagreed (3) or strongly disagreed (3) with this statement. The participants justified their answers by saying that: teachers should congratulate students, not compare them (Annabelle); teachers could compare the students' own progress that they have made (Mélissa); and that competition between students for grades is discouraging (Claire). Isabelle justified herself by saying that:

> Telling students how well they have done in relation to others in the class is the worst thing a teacher can do. Students will feel superior and the others will be discouraged and also feel that they are weak, unintelligent and maybe even worse.

The 7th item inquired as to whether teachers should use questions mainly to elicit factual knowledge from their students. For this item, we had different answers: three participants agreed with this statement, two disagreed and one was undecided. Although two participants justified that

asking questions seem to be a good strategy (Mélissa) as they represent "a good and simple way to see if the students understood" (Marc-Antoine), three other participants added in their answers that teachers should also ask questions to make students think and reflect (Annabelle, Claire and Isabelle).

When asked in item 8 if they considered the most worthwhile assessment to be the assessment that is undertaken by the teacher, once again, the majority of the participants seem to agree with this statement as four of the six participants marked that they agree, one marked strongly agree and one marked undecided. According to Carlos, "that is the type of assessment that works best." Mélissa justified her answer by saying that although that she believes that students' assessment may be interesting, they might lack clarity in certain parts. Isabelle claimed that due to teacher's expertise in terms of knowing his or her students' strengths and weaknesses, he or she knows what to assess in order to check if all students understand what has been taught.

Item 12 asked the participants' opinion on whether assessment of students' work should primarily consist of marks and grades. The majority of the participants seem not to be in favor of this statement as four of the six answered that they disagreed, one answered strongly disagreed and only one answered agreed. The participants that disagreed or strongly disagreed with this statement mentioned other aspects that should be considered in terms of assessment such as effort and participation (Mélissa), comments and notes from the teacher (Annabelle and Claire); and feedback (Isabelle and Marc-Antoine). According to Annabelle, "a number won't tell what students have to work on in order to improve." The only participant who agreed with this statement was Carlos who justified his response by saying that marks and grades are used "to help them better understand what they are being assessed on."

Finally, item 23, which was similar to item 2, focused on whether students' learning objectives should be determined mainly by the prescribed curriculum. Three participants answered that they disagree with this statement, two were undecided and one answered agree. The majority of the participants seem aware that: teachers should focus more on students' needs (Carlos); the objectives prescribed by the Ministry are too specific (objectives are something personal) (Annabelle); although the curriculum provides what has to be done, "the teacher can challenge the

students with what he or she thinks can enhance the curriculum" (Claire); and the teachers should take into consideration the students' interests as they will make the students more motivated to learn (Isabelle). Overall, the participants agree that assessment is linked to needs and goals of students and that teachers play an important role in meeting these.

As stated throughout this study, acknowledging pre-service teachers' prior beliefs is an essential task in terms of providing pre-service teachers with a meaningful teacher education programme as these beliefs could filter and block out incompatible programme experiences (Borg, 2003; Hollingsworth, 1989). Therefore, to obtain reliable and rich results and to validate and find more information about the prior beliefs and practices identified in our participants' initial questionnaire, we also conducted a semi-structured interview at beginning of their fourth year. Once these prior beliefs were compared and confirmed, they were also used to analyze and justify our participants' assessment practices. As recommended by the literature, when it comes to investigating teachers' beliefs, researchers should also see the participants in action, as their stated beliefs and practice could differ (Basturkmen, 2012; Pajares, 1992). Therefore, we will present in the next subsection the results found in their first semi-structured interview.

1.1.2 First semi-structured interviews

As previously mentioned, the semi-structured interviews took place once the participants had sent in the completed questionnaire. Thus, once the interviews were transcribed, they were analyzed and classified into three main themes: (a) vision/conception of teaching; (b) how do teachers learn: the influence of their previous practica and university courses; and (c) their expectations for the fourth year (what was missing in terms of assessment and formative assessment). Next, we will present the findings related to these three themes.

1.1.2.1 Theme 1: conceptions of teaching

As presented in the review of the literature, beliefs have been known to influence how pre-service teachers learn to teach and assess (Calderhead, 1996; Freeman & Johnson, 1998; Holt-Reynolds, 1992; Wideen et al., 1998). Furthermore, we also stated that among these beliefs, we

find pre-service teachers' general conceptions on teaching and learning that can work as filters, thereby blocking out programme experiences that are cognitively incompatible with their prior beliefs. Thus, during our first semi-structured interview, we identified and grouped our participants' conceptions of teaching in three questions: "What makes a good teacher?"; "Is teaching a talent people are born with?"; and "How does someone become a teacher?."

1.1.2.1.1 What makes a good teacher?

As previously mentioned, pre-service teachers' prior beliefs include their general conceptions on teaching and learning which could filter and block out programme experiences that are cognitively incompatible with them (Calderhead, 1996; Freeman & Johnson, 1998; Holt-Reynolds, 1992; Wideen et al., 1998). Therefore, identifying our participants' prior beliefs of conceptions of teaching was the first step we took to determine how their beliefs and practices evolved throughout their fourth year. In terms of their opinion of a good teacher, all six participants mentioned the importance of having the students as the center of teaching. Mélissa, for example, stated that a good teacher should do "different activities outside of class like being part of the radio committee, (…) just trying to differentiate your teaching, like being involved in the school because it will always bring something better for the students." Claire shows that she understands the importance of the teachers' role in assessment when she claimed that "learners change over time and you got to be able to adjust."

1.1.2.1.2 Is teaching a talent people are born with?

When asked whether teaching was a talent people are born with, our participants' beliefs varied. While Annabelle, Carlos and Marc-Antoine believe that teaching requires a talent that people are born with, the remaining participants (Mélissa, Claire and Isabelle) believe that teaching is a skill that can be acquired.

1.1.2.1.3 How does someone become a teacher?

The answers provided by our participants corroborate their prior beliefs identified in the previous subsections. For instance, Claire, who believes one must acquire certain knowledge to become a teacher, mentioned the influence of knowing technical elements such as psychology of children and adolescents and how to create effective lesson plans. Furthermore, Isabelle, who answered that one must work to become a teacher, mentioned that her 8-year experience working in a day camp as a chief counsellor with students from kindergarten to grade 6 helped her "build her talent as a teacher." In other words, Isabelle is aware that her prior experiences helped in shaping her teacher identity by probably learning about her own strengths and weaknesses. Finally, Carlos, who answered that one is born a teacher, now believes that someone becomes a teacher…

> The minute you start[ed] looking at life in a different way…and saying, "oh this could be useful in the classroom" or "what that person did, whether it is in a conference or anywhere, would actually work"… teaching is every day. It is not just in the classroom.

Carlos's statement about how becoming a teacher is part of one's everyday life highlights Vanhulle's (2009a) first and second requirements of teacher education programmes to promote professional development. They do this by firstly, providing pre-service teachers with knowledge that would make sense to them ("oh this could be useful in the classroom"), and secondly, by helping pre-service teachers see themselves as responsible for renewing the educational culture ("what that person did, whether it is in a conference or anywhere, would actually work"). For this aspect of the study, the participants recognise the process involved in becoming a teacher even if they do not all agree on this process.

1.1.2.2 Theme 2: pre-service teachers' teaching and assessment knowledge acquisition

In the second category, we included the following questions: "What were the most relevant elements during their teacher education programme?"; "What was the role of your practicum, your associate teacher and university supervisor on your learning to teach process?"; "How useful was your formal evaluation course?"; "What is your definition of formative

assessment?"; "How do you prepare your pupils for assessments?"; and "How should teachers assess their pupils' progress?." Following are the beliefs that we have found.

1.1.2.2.1 What were the most relevant elements during the teacher education programme?

In terms of the elements that influenced our participants the most, once again, they had different beliefs. Three out of the six participants mentioned the practica as the most important element, followed by didactics (methods) classes (mentioned by two participants), ethics, writing and grammar courses (one participant each). Although Carlos did not initially mention the practica as the most influential element in his teacher preparation, when asked his opinion about how he perceived the importance of the practicum on his teacher education programme, he acknowledges its importance by stating that:

> They [practica] are interesting because the people who run the courses are teachers themselves or have been teachers. I think that they [associate teachers and university supervisors] are the people who bring in the most…you know, they bring in more information than, for example, the psychology teacher, that is teaching the psychology class there.

As previously mentioned, pre-service teachers tend to place a higher importance on their field experiences than on their course work (Bullock, 2011). However, if these expectations are too high, unrealistic or are not met, pre-service teachers might feel that they did not learn anything. Thus, as we also previously claimed, simply increasing the amount of practicum time or providing pre-service teachers with these experiences without supporting their learning from the experiences does not guarantee the quality of teacher education programmes. That is why it is important to also identify pre-service teachers' expectations towards their practicum, their associate teacher and their supervisors as these expectations also shape how pre-service teachers learn to teach and assess.

1.1.2.2.2 What was the role of your practicum and your associate teacher?

In order to find more information about their vision of the role of their practicum on their teacher education, we asked our participants about the role their associate teachers and the practicum supervisors that they have had up to now. In terms of their associate teachers, two out of six participants (Mélissa and Marc-Antoine) state that they saw them as guides; and two others participants saw associate teachers as people who provide feedback on their practices (Annabelle and Isabelle). Carlos and Claire mentioned that in order for the practicum to be successful, there must be a connection with the associate teacher, such as sharing the same teaching methods or approaches.

1.1.2.2.3 What was the role of your university supervisor?

When asked about their practicum supervisors, we also found different beliefs although they are all related to the university-mandated role of offering support and guidance. The participants believe that practicum supervisors' role is: to guide (giving advice) towards becoming better (Claire); to provide student-teachers with tools (Mélissa); to be in charge of formal assignments (Annabelle); to provide support between student-teachers and the university (Carlos); and to be there when things do not go well (Isabelle and Marc-Antoine). It is interesting to note that none of the participants mentioned the role of the university supervisor in relating theory to practice during the practicum.

1.1.2.2.4 How useful was your formal evaluation course?

For some participants, their formal evaluation course was useful in terms of creating assessments (Annabelle); it was practical and good but not well-thought out and not sufficient (Mélissa); it prepared them well, but she still does not feel 100% ready to assess (Claire); and having only one course does not prepare student teachers to assess as student teachers do not really know how to evaluate students (Marc-Antoine). Therefore, based on our participants' statements, it seems that BEALS formal evaluation course did not fully prepare our participants to assess their pupils as the majority of them believe that they did not learn enough with only one course.

1.1.2.2.5 What is your definition of formative assessment?

In the next question, we asked our participants about their personal definition of formative assessment. What is important to notice here is the fact that all participants highlighted the importance of keeping track of their students' learning progress. Moreover, besides believing that assessment is a tool for collecting information, Carlos questions the need for giving grades. He states that "as for the teacher, if we are just going to collect data to maybe better our students, then why give them a grade?" His question shows that he is beginning to think deeply about assessment in relation to learning.

1.1.2.2.6 How do you prepare your pupils for assessments?

The next question that we asked our participants that was classified as the second category was how they prepared their pupils for their assessments. This question had the purpose of identifying their ideal practice based on their previous experiences during an earlier practicum or a university course. According to Isabelle, despite having seen many assessment techniques in her university classes, she would not use some that her professors were using because she thought they were not fair for the students. For instance, during the interview, she mentioned that in one of her classes, although being evaluated with different assignments, there was one that was worth 50% of the grade, which made many of her classmates (including herself) stressed. Another interesting justification was provided by Carlos who highlighted the subjective factor of assessments. He claims that assessments are only effective when teachers create their own assessment tool, as it will allow them to look for specific information seen in class. Mélissa believes that teachers must review and make sure students are familiar with the material they have taught before giving a test. She states that during her previous practicum done in Intensive English (3rd year),

> We had tests every week and so you really go through what you taught, the little things that were really precise in class like you went through it, you gave a lot of examples, and the students seem to understand, they had [a] homework to go back to.

1.1.2.2.7 How should teachers assess their pupils?

The final question that we classified within the second theme was how teachers should assess their pupils. The purpose of this question was to see if the participants could name tools (formative and summative) that they have encountered through their teacher education programme (or previously as students). Based on their answers, we can state that all participants are aware of the importance of keeping track of students' progress. They mentioned that teachers can: use activity sheets, ask questions and observe students (Annabelle); use grids (Carlos); portfolios and use notes to keep track of students' understanding (Claire); have them practice through activities (sheets) and have them come to the front of the class (Isabelle); by teaching something and progressing towards a summative assessment (Mélissa); and practice (formative assessment) for the real evaluation (summative assessment) (Marc-Antoine).

1.1.2.3 Theme 3: pre-service teachers' expectations of their fourth year in terms of their practicum and assessment knowledge

In this category, we included questions related to: (a) their expectations towards their fourth-year practicum; and (b) their readiness to assess their students' progress. Following, we will present their beliefs.

1.1.2.3.1 Expectations towards their fourth-year practicum

When asked about their expectations in terms of their last practicum, the participants seemed mainly to seek feedback, support and guidance from their associate teacher. For instance, Annabelle, Mélissa and Claire stated that they expected feedback and guidance from their associate teacher in terms of what they still needed to improve and Carlos mentioned that he would like some input when dealing with parents. In terms of assessment practices, only two participants mentioned having expectations in that matter. Annabelle claimed that throughout her entire teacher education programme, she never had the opportunity to assess her students' C3. The other participant that included assessment as one of her expectations was Mélissa. She claimed that she

wished she had been able to create and adapt grids related to specific assignments, since she also had never done it before.

1.1.2.3.2 Readiness to evaluate and assess

Finally, we asked our participants if they felt ready to assess their pupils at the beginning of their fourth year, and the majority of them seemed somewhat concerned with this teaching task. For example, Annabelle claimed that assessing students' progress on her own was still something she was not comfortable with. Carlos, on the other hand, believed that in his own way, he felt ready, but he wasn't ready to follow the guidelines and use the documents of the Ministry. Mélissa stated that assessing students was a lack that she had due to the fact that she had only had one evaluation course (at the beginning of her teacher education). Claire claimed that she did not feel ready to evaluate at the high school level because she had only been able to work with the evaluation framework for the primary level during one of her methods classes. Isabelle stated that she felt somewhat ready: she felt insecure to assess because she only had one evaluation class, but felt "ready in a way" because of what she had seen and learned with her associate teachers during her practica.

In the next section, we will present the results found during the data collection that took place during their last practicum in order to identify their beliefs and practices related to formative assessment while on practicum.

1.2 Pre-service ESL Teachers' Beliefs and Practices Related to Formative Assessment During their Practicum

As previously mentioned, in order to identify how pre-service ESL teachers' beliefs and practices evolved throughout their last year of teacher education programme, we focused on pre-service teachers' practices while they were on their practica as it is the best way of knowing more about how pre-service teachers' beliefs and knowledge develop (Tang et al., 2012). Thus, after having identified pre-service teachers' beliefs and practice at the beginning of the year, we collected data during the middle of their last year (during their practicum) using two data collection

tools: one stimulated recall session and one spoken and written narrative. In terms of the efficacy of stimulated recall sessions, Thomas et al. (2011) state that through their stimulated recall interviews, they were able to have access to non-observable teacher practices. In terms of the use of narratives in second language research, Golombek and Johnson (2004) state that it allows teachers to seek for the understanding of events that took place in the classroom, make links between what is known and unknown to them and to shape their identities.

1.2.1 Stimulated recall session

In order to analyse the data from our stimulated recall sessions, we divided the answers into four themes: (a) the content of the class – why did the participant choose that particular class to record and what is happening in the class; (b) checking for students' understanding (formative assessment) – how did the teachers prepare the students for it?; (c) preparing students for assessments – how do teachers keep track of their students' progress?; and finally, (d) the main source of their assessment knowledge – where did they learn to teach in such a way? These questions were chosen to reveal if pre-service teachers' beliefs related to formative assessments also matched their formative assessment practices.

In order to analyze their assessment practices, as previously mentioned, we used Cowie and Bell's (1999) model of formative assessment mainly due to its compatibility to the reality lived by pre-service teachers in their practicum context. In their model, formative assessment practices can be divided into two types: (a) planned formative assessment practices – in which teachers would plan activities (and questions) to gather general information from the entire class about pupils' progress in relation to the curriculum; and (b) interactive formative practices –assessment that happen during student-teacher interactions to mediate the learning of individual students in relation to the subject and social and personal learning (Cowie & Bell, 1999).

1.2.1.1 The content of the class

As previously mentioned, we asked our participants to choose and record a class in which they would be formatively assessing their pupils. Besides being an opportunity to actually see the

participants' assessment practices, by having them choose their own moments, we were expecting to be able to see and understand their vision of formative assessment with each one of their choices. However, when asked why they had chosen to record that particular class, the participants seemed to have different reasons. Annabelle and Isabelle claimed that they wanted to see how they would perform while teaching something new and how their students would reinvest. Carlos stated that it was due to a university requirement (students have to film themselves at least twice) and also to see how he would teach grammar notions. Claire justified that it was the only class that matched the requirements of the study (during all the other classes the students were doing evaluations) and Marc-Antoine said it was just a random class in which he formatively assesses some new content that he had recently taught.

In order to better understand pre-service ESL teachers' formative assessment practices, we also asked our participants to describe their class (what they were doing/teaching). Annabelle, for instance, claimed that reviewing what she had taught her students until that moment was something that was part of her routine. Claire stated that she was making sure her students had all the necessary knowledge to begin a new project. Isabelle, on the other hand, wanted to review a concept (plural forms) she had noticed their students were struggling with. Carlos claimed that he was not sure whether his associate teacher had previously taught the same content, so it could either have been considered as a review or as something new.

1.2.1.2 Checking students' understanding

After analysing their videos, we noticed that all of our participants asked their pupils questions, which is a form of formative assessment (Cowie & Bell, 1999). Through questions (asking students questions or students asking teachers questions), teachers (and pre-service teachers) are able to elicit, interpreting and act on information collected on their pupils' skills and understanding (planned formative assessment) and to notice, recognize and respond to information about the students' understanding (interactive formative assessment) (Cowie & Bell, 1999). Thus, during the stimulated recall sessions, we asked our participants questions to validate whether their questions were previously planned (planned formative assessment) or asked on the spot (interactive formative assessment). In terms of our results, Claire, Mélissa and Isabelle claim that

they usually prepare their questions ahead of time (planned formative assessment) and three participants, Annabelle, Carlos and Marc-Antoine state that they do not plan their questions ahead of time (interactive formative assessment). However, Annabelle stated that she does plan questions to be asked but only on Mondays (about her pupils' weekend activities).

Next, we asked our participants if they would choose in advance the students to whom they would ask their questions. According to their answers, the majority of the participants claim that they make their choices on the spot (Carlos and Mélissa) or they would choose the pupils who would raise their hands to answer (Annabelle, Claire and Marc-Antoine). The only participant who claimed that she systematically choses her pupils was Isabelle. She stated that when asking questions, she assigns the easiest ones to the weak students and the hardest ones to the strong ones so they don't get bored.

1.2.1.3 Preparing students for assessments.

To further our understanding of our participants' assessment practices and see how they would evolve during their practicum, we asked our participants how they kept track of their pupils' progress and how they prepared them for assessments. As we found in their answers, they claim to use different tools such as small tests, exams and dictations, and by asking questions. Mélissa, for example, affirmed that she tried to encourage all students (including the weaker ones) to participate to make sure they understood the content being taught. In case she noticed they did not, she would ask them to stay during recess or lunch time. As previously seen, noticing is the first step of Cowie and Bell's (1999) interactive formative assessment practices in which teachers obtain information through students' communication, both verbal and non-verbal through different moments by interacting with them. Annabelle mentioned that she would give small tests "to get a feel if they don't understand." Annabelle's statement also corroborates Cowie and Bell's (1999) planned formative assessment practices as she planned activities (small tests) to elicit formative assessment information on how students were constructing their knowledge (what they actually learned about what was being taught). An important practicum issue emerged in Claire's answer. During the stimulated recall session, Claire showed concern for keeping track of her pupils' progress due to her specific practicum situation. Despite being able to name some of the possible

tools (practices) such as weekly assessments and journals, she affirmed to have been using only the summative assessments as required by her associate teacher, which was a practice that she did not believe in. As previously stated, a mismatch between the pre-service teachers' beliefs and their assessment practices could lead to severe consequences (Sikka et al., 2007). Therefore, Claire's statement highlights the importance of having associate teachers take pre-service teachers' prior beliefs into consideration (and help them challenge their beliefs) in order to provide them with the most useful support.

1.2.1.4 The main source of their assessment knowledge.

The third and last theme identified during the stimulated recall sessions was the main source of their assessment knowledge. Based on the practices identified during the video or mentioned during the stimulated recall session, we asked our participants about the origin of their knowledge to assess. Some of their answers were: learned at the university through courses such as their teaching methods, oral communication, grammar, and professional essay courses, or through observing professors; previous experiences before university; or finally previous or current practica. Only 1 participant out of the 6 (Carlos) mentioned that previous teaching experiences influenced his current practice. However, 5 out of the 6 participants were not able to track the precise origin of some of their assessment knowledge (Annabelle, Carlos, Mélissa, Claire and Marc-Antoine).

In the next subsection, we will present our findings from the narratives that were also collected while our participants were doing their last practicum so as to help us better understand their beliefs and practices related to formative assessment.

1.2.2 Narratives

As mentioned in chapter three, narratives are known to help identify pre-service ESL teachers' "knowledge and disposition development and transformative actions towards teaching English learners, as well as existing gaps (e.g. misinterpretations of the use of home language) in their understandings" (Pu, 2012, p. 12). The choice of using narratives in our study was not only

to help us understand how pre-service ESL teachers' beliefs and practices related to formative assessment evolved (how they learned, how they were using it, and what still needed to be learned), but also to see how they perceived the assessment process, that is, how they saw interaction with their pupils and school staff within their particular context. In terms of the data analysis, we followed the three dimensional model suggested by Clandinin and Connelly (2000): (a) personal and social (interaction) – how they describe their in-class interactions with the students and other teaching staff; (b) past, present, and future (continuity) – their acquired knowledge in relation to past and present experiences and what they still need to learn in the future concerning their assessment practices; and (c) notion of place (situation) – the context of their teaching environment (needs and particularities).

1.2.2.1 Personal and social interaction

The goal of identifying participants' personal and social interaction, in other words, how they described their in-class interactions with the students and other teaching staff, was to identify their beliefs about how they believed this relationship should be and their actions in the classroom. Thus, all the participants acknowledged the importance of using formative assessment as a way of getting to know their students and to adapt their practices to match their students' needs. Among some of their justifications, we can mention Annabelle's who stated that teachers should question and improve their own teaching methods such as adapting and modifying grids to make them fit each of their groups. In order to do so, she claimed that the teachers must first know their students so that they can later adapt the tools they use. Carlos recommended the use of assessments as a tool to improve students' skills and knowledge instead of simply using them as a barometer to know who succeeded or did not. Mélissa mentioned that during her practicum she would give her students weekly assessments with subjects that students were more comfortable with "to evaluate their progress and understanding."

1.2.2.3 Past, Present and Future

The second dimension proposed by Clandinin and Connelly (2000) was the past, present and future. In our participants' narratives, we looked for statements that described how participants

described their assessment knowledge in relation to past and present experiences and what they still needed to learn. We found that five out of six participants mentioned negative or stressful experiences with assessments. For instance, Annabelle mentioned that as a student, studying the material and memorizing it by heart was not effective because although she was able to get an excellent grade, she would tend to forget what she had studied afterwards. She also claims that she would have liked to have learned at the university "how to evaluate instead of how to create tests only because I feel like I am relying on my judgement which might be totally off track." Annabelle's statement exposes one of the BEALS' formal evaluation course's weaknesses previously mentioned in chapter one: based on our analysis of the course syllabus, it seems that BEALS' formal evaluation course mainly focuses on how to create tools (tests, quizzes and grids) when teaching a second language, rather than on how to assess students' learning. Mélissa also mentioned not liking to memorize materials for an exam. In addition, she stated that she believes that:

> In a perfect world, and evaluation would have no time limit, no big group where you hear everyone turning their pages, where you would be allowed to listen to music in order to concentrate. Basically, the evaluation should be done in an environment that is best for the learner and that would advantage them.

We can also mention Claire's example in which she highlights her lack of preparation to use the progression of learning (Gouvernement du Québec, 2009a, 2010a), because due to the fact that now that she has a teaching contract, she is not able to have a discussion concerning these documents with her high school colleagues teaching the same grades. Claire's statement also exposes a problem previously mentioned in chapter one. After its initial implementation, Quebec's competency-based approach went through several changes and teacher education programmes were only informed of these changes after the documents were already published. As a consequence, pre-service teachers continued to go into their practica unaware of the newer documents and unfamiliar with changes in Ministry requirements. This situation leaves pre-service teachers feeling frustrated with their preparation and the lack of coherence between what they were provided with at the university and the various documents used by their associate teachers. We hope that this situation will improve over time.

Nonetheless, Isabelle mentioned a positive experience she had with assessments in one of her university classes that influenced her practice. According to Isabelle, one of her professors would evaluate the group's assignments, give them back and give the opportunity to correct them and get back half of the points they had lost. Thus, she mentioned that when she would have her own classes, she would "use this motivating and encouraging technique with my students." The only participant who affirmed not being stressed during assessments as a student was Marc-Antoine. As a high school student, Marc-Antoine attributes this to the fact that he felt that he had good teachers who prepared him well. In addition, he also claimed that he did not really understand the importance/relevancy of assessments while in high school, but as a university student, he believed that everything that the professors would teach him was significant and it would be on the exam or in the assignment.

1.2.2.4 Notion of place

The third and last dimension found in Clandinin and Connelly's (2000) model is the notion of place. In the case of our research, we were interested in the context of their teaching environment, special needs and particularities that could influence their beliefs and practice. Since pre-service teachers are placed in different practicum contexts with different associate teachers, the analysis of their answers placed within this category (dimension) highlighted how pre-service teachers within the same cohort might graduate with different competencies and experiences. Annabelle stated that throughout her practicum, she was able to identify students' strengths and weaknesses and modify her assessment grids and evaluations to fit her students' level. Mélissa, who did her last practicum in an Adult Education center, had to adapt her teaching to the level of her students. As she states, she would help them by "taking what they said and asking how this could be said in English" or by "helping other students to formulate their thoughts a little more clearly." In Claire's context, she was introduced to an evaluation approach that would mix formal evaluations and participation (3 evaluations per competency and 10% for participation), which she was happy to use. Furthermore, Isabelle claimed that in her practicum, she was able to help her students manage anxiety with their evaluations and assessments by making sure to tell them that they did not have to be anxious and by reminding them that "they had the potential to achieve anything they wished and all they had to do was to have confidence."

In the next subsection, we will present our findings resulting from the last two data collection tools that were used at the end/after their practicum: a final questionnaire and a final semi-structured interview. The questionnaire was used to identify whether pre-service teachers' beliefs related to formative assessment had changed at the end of their fourth year. In terms of our second semi-structured interview, we were interested in finding more about pre-service teachers' beliefs and practices related to formative assessment and how they evolved during their fourth year. Once these beliefs and practices were identified, we analyzed and compared them with our participants' initial beliefs and formative assessment practices during their practicum in order to determine how they evolved and which elements influenced their evolution.

1.3 Pre-service Teachers' Beliefs and Practices at the End of their Fourth Year

1.3.1 Final questionnaire

As justified in chapter three, we used the same 30-item questionnaire that was given to our participants at the beginning of the year to identify what changed/evolved since the beginning of their fourth year of teacher education. To make sure our participants would remember their answers, we restated them in the new version and asked them if their view had changed (or not) and requested that they provided us with a justification. Once again, we will present our findings grouped in the same three categories proposed by James and Pedder (2006): assessment as a tool to make learning explicit; assessment as a way to promote autonomy; and assessment so as to provide performance orientation (James & Pedder, 2006). This will show how pre-service teachers' beliefs evolved and which elements contributed to this process since the beginning of their fourth year.

1.3.1.1 Assessment as a tool to make learning explicit

Once again, the ten items in the questionnaire that contained statements that focused on practices that promoted assessment as a tool to make learning explicit were items 1, 4, 10, 11, 18, 20, 21, 22, 25, 27 and 28. Although there were changes in five items, the majority of the participants still seem to agree or strongly agree that assessment should be used a tool to elicit

students' understanding and thus, serve as a base to plan the following questions. Since the purpose of this tool is to identify changes in beliefs and practices, and in the interest of restricting the length of this document, this analysis will focus on those items where changes were identified.

In terms of Item 1, when asked if assessment provided teachers with useful evidence of the students' understandings which could be used to plan subsequent lessons, five out of our six participants' answers remained the same as in their previous questionnaire. Among their justifications, we can cite Annabelle who stated that her view did not change due to the fact that she was able to plan lessons according to her students' results and the mistakes they were making in their assessments. Carlos claimed that he still believes that assessments are tools used to gather data about students. Isabelle also agreed with this first statement by saying that "students' assessments provide teachers with useful evidence on how students understand or not on certain subjects taught." The only participant whose view changed was Marc-Antoine. Although he did not state whether he agrees or strongly agrees, through his justification, we can see that his practicum influenced his belief as he claimed that:

> My view has changed. Over my 45 days of practicum, I had the chance to see that assessments were very useful evidence of the students' understanding. I had to do a big review of many grammar elements and, with the assessments, I was able to see whether or not students needed more time to work on it or it they had mastered the grammatical aspect.

In item 4, which focused on whether the feedback students receive should help them improve, five out of our six participants' answers remained the same. For instance, Claire added that besides agreeing with this statement, she believes that students should also receive feedback on what they already do well otherwise they could feel discouraged or less motivated. Isabelle also used her practicum experience to justify her answer. She wrote that "I have seen during my practicum that giving feedback helps them [students] improve. Teachers see where students have difficulty and then it is by looking back at the exercises that it is possible for the students to finally understand." The only change that we observed in this item was in terms of Annabelle's view. She, who had initially answered agree, at the end of her fourth year wrote that she would say that she

strongly agrees that "feedback should help students to improve if they pay attention or if they actually read feedback."

When asked whether teachers should use questioning mainly to elicit reasons and explanations from their students, which was our item 18, we found changes in two of our participants. Claire, who previously disagreed with the statement, now agrees with it. She believes that "complete answers from students are always better and eliciting reasons and explanation will help students to develop and becoming better." Isabelle who initially did not choose an answer, now answered that she disagrees with the statement. In her opinion,

> Teachers should use questioning to come back (sic) on a notion that was not understood and clarify it with the students. Of course, it can be used to elicit reasons and explanations from the students, but there are many situations where it is important to use questioning to see if the student understands or where he/she misunderstood.

For item 20, when asked if students' errors should be valued for the insights they reveal about how students are thinking, five out of six participants' answers remained the same. Claire, for instance, stated that she still agrees because she believes that "errors are a way to improve and to reflect on the students' learning, but also on the teaching." She also added that she finds it "important to see how the students think to be able to help him/her go in the right direction the next time." The only participant whose view changed was Annabelle. Although she did not provide an actual answer, (she had previously answered "agreed"), she stated that her view changed as she believes that

> In order to see what students are thinking we need to ask them. It is difficult to see it via a paper only. In other words, I believe students' misunderstandings cannot be witnessed on a paper only. In order to know what students are thinking, we need to ask them. The assignment is not enough to demonstrate the entire thinking process.

Item 22 asked the participants their opinion on whether the assessment of students' work should be mainly in the form of comments. Once again, five out of six participants' answers

remained the same. For instance, Carlos stated that he still remained undecided "since students are not sure exactly what that represents." Isabelle answered that she still agreed with the statement she believes that "comments are the best way to help students understand where they had trouble" especially when you have more than 25 students in class "because they do not always have the same weaknesses." The only changed that we observed in this item was concerning Claire's view. In our first questionnaire, Claire answered undecided, but in her second one, however, she stated that:

> Up to now I would say that I agree, I use a lot of comments, but there are others that I would like to try such as pictograms of images (mostly for younger students). I answered undecided because I had those other ways in mind.

One change was observed in item 27, which asked our participants whether student effort should be seen as neutral when assessing their learning, whereas five out of our six participants' answer remained unchanged. This change observed was in Mélissa's questionnaire. She, who had initially answered strongly disagree, at the end of her fourth year, only disagreed with the statement as she believes that "it is what can make the difference for every single student."

1.3.1.2 Assessment as a tool to promote learning autonomy

The second category of purpose of assessment found James and Pedder's (2006) questionnaire included thirteen items in which assessments are seen as a tool to promote learning autonomy. As previously mentioned, these items were 9, 13, 14, 15, 16, 17, 19, 24, 25, 26, 29 and 30. Although there were changes in four items in terms of the participants' point of view, the majority of our participants still seem to either agree or strongly agree with the statements. Therefore, we can affirm that our participants also still see assessments as tools for promoting students' autonomy at the end of their fourth year. Once again, we will only focus on the items in which our participants' answers changed.

Item 9 questioned the participants on whether teachers' assessment practices helped students to learn independently. Two out of six participants' views changed. Claire stated that she

now agrees with this statement as she believes that "good assessment practices allow students to learn on their own and to study on their own. Sometimes students have issues with studying because the assessments of the teachers are not helping them to focus." Isabelle's view also changed as she agrees that students can become more independent after practicing different assessments. She believes that students "become more familiar with how they are supposed to accomplish a work and what is expected of them."

In item 17, we asked our participants if their views had changed in terms of whether students should be helped to think about how they learn best. The only participant whose view changed was Marc-Antoine as he stated that he now agrees with this statement because "some students are not aware of how they learn best, they just can't see it. So, it is our job as teachers to tell them and put them in situations where they can learn best."

The following item in this category asked the participants if their views had changed in terms of whether students should be helped to plan the next steps in their learning. The one participant who changed his view was with Marc-Antoine. According to the participant, despite not remembering why he had answered disagree the first time, based on his fourth-year practicum he stated that, "students do what they have to do and then, they wait for another assessment. I don't think that they are able to plan the next steps in their learning."

The last item of the second category was item 30. In this item we questioned our participants if teachers should regularly discuss with students ways of improving learning/how to learn. The participant whose view changed was Marc-Antoine. He claimed that based on his all four practicum experiences, "teachers should regularly discuss with the students ways of improving learning because in a classroom you have 32 different students, so they all learn differently" and they also need to go over different learning strategies in order to cover students' different learning styles.

1.3.1.3 Assessment as a way of measuring performance goals

As previously mentioned, the items in which assessments were categorized as a way of measuring performance goals were items 2, 3, 5, 7, 8, 12 and 23. Despite the changes found in items 2, 5, 8 and 23, the majority of the participants still either disagree or strongly disagree with the items within this category, which means that they still do not believe assessments should be seen as a way of measuring performance goals. We will once again only present the items in which our participants' answers varied.

In item 2, we asked our participants if their views had changed about whether assessment is a way of measuring performance goals and the answer was negative for four of them. However, Annabelle and Mélissa stated that their views had changed. According to Annabelle, who answered strongly agree at the beginning of her fourth year, she now agrees with this statement because she believes that teachers should follow the curriculum even if some students are still struggling with the material. Mélissa, who was initially undecided on this matter, now disagrees as she believes that teachers should plan according to their students' understanding.

The 5th item asked the participants again if students should be told how well they have done in relation to others in the class. The only change that we observed in this item was in Annabelle's view who now strongly disagrees because she believes that "learning is not a competition." Although she also believes that it is positive to let students know how well they have improved, teachers should not let them know how the others did.

The next item in the category was item 8. When asked at the end of their fourth year if their view had changed whether they considered the most worthwhile assessment to be the assessment that is undertaken by the teacher, three out of our six participants answered positively. The ones that changed their opinion were Annabelle, Mélissa and Claire. At the end of her fourth year, Annabelle agrees with the statement as she believes that

> …students might have some good ideas about how to assess some things to make them more interesting or original. I would say that the teacher knows best what has to be covered or evaluated, but it might be interesting to let students take on once in a while.

Mélissa seems now to be undecided. Although she did not provide an explicit answer, she stated that the assessment undertaken by the teacher is "now the most efficient form of assessment." However, she also claimed that "it is possible that there are more worthwhile assessments but can they be ideal for all students especially comparing primary school students to adult education? I believe there are a lot of things to consider." Claire stated that she would now agree with the statement as believes that "teachers must assess themselves to improve their teaching. We need to know that we are doing our best and that changing our practice is beneficial for all students." Carlos, Isabelle and Marc-Antoine, on the other hand, still believe that the teacher is the one who has the knowledge and who knows what needs to be assessed.

We asked again on item 12 if the assessment of students' work should primarily consist of marks and grades and only we found one change in one out of our six participants' answers. The change found in this item was in Mélissa's questionnaire. She stated that she now disagrees (instead of strongly disagreeing) because of her lack of knowledge of which other assessments she could use instead of marks and grades. In her opinion,

> One of the most important things to consider is student progression which to me is some sort of mark. If this is not the case, I would DISAGREE with this statement. Personal notes should always be considered. But primarily, marks and grades remain the easiest ways to assess students.

In the next section, we will present the results found in our last data collection tool, that is, the semi-structured interview also done after the end of their practicum.

1.3.2 Final semi-structured interview

Once again, we did our semi-structured interviews once the participants had sent in the completed questionnaires. These interviews took place between the months of April and May and were conducted this time only by the author since he was no longer the supervisor of any of the participants. As described in chapter three, in order to analyze our final semi-structured interviews, the first step was to transcribe the audio recording. Then the statements were analyzed and classified into five themes. The first theme included pre-service teachers' expectations and missing assessment knowledge at the beginning of the fourth year. Theme two focused on how their assessment knowledge was acquired during the fourth year. The third theme targeted pre-service teachers' assessment practices during the last practicum: what changed in their practice, how did it evolve and how did they perceive the process of reflection on their practices? Theme four was intended to identify pre-service teachers' purposes of assessment: why and how should teachers assess? Finally, theme five focused on pre-service teachers' assessment readiness, in other words, their confidence to assess at the end of their fourth year of teacher education. As previously mentioned, the goal of our second semi-structured interviews was to also identify pre-service teachers' beliefs and practices related to formative assessment at the end of their fourth year in order to determine if they evolved or changed and which elements impacted this process. In addition, we were also seeking further information on the possible origins of these changes.

1.3.2.1 Expectations and missing assessment knowledge at the beginning of their fourth year

When we asked our participants what their expectations were at the beginning of their last year, they were basically looking for more practical knowledge about the evaluation process with pupils. For instance, Annabelle stated that she was expecting to be able to try out evaluations that she would create. Claire and Isabelle shared similar views. Both participants were expecting to learn how to evaluate their pupils fairly, or as Isabelle stated, when evaluating students, teachers "often compare students to each other and that is something that I try not to do because everybody is different and everybody learns at a different rate." Mélissa, who was doing her practicum at the Adult Education level, was expecting to learn how to evaluate adults since she had no experience

in this at all. And finally, Marc-Antoine, expected to have opportunities to evaluate students as many times as he could because he felt that he had not previously received enough information or opportunities.

1.3.2.2 Missing assessment knowledge

The second question that we grouped in the same theme was which elements they thought were missing at the beginning of their fourth year that they still wanted to learn before graduating. The purpose behind this question was to identify their expectations towards their last year of teacher education. Besides once again looking for more practical elements/activities to help them evaluate their students adequately/fairly, the participants were also expecting to learn how to evaluate pupils in specific grade levels. Annabelle, for example, claimed that she did not know "what the points to evaluate were and the materials to be evaluated for each level." Claire was looking for ways to teach and assess her students at "the right level" because as she stated, "you never know if what you are doing is right, or it is too difficult or if it is not difficult enough." Carlos was expecting to deepen his assessment knowledge such as through learning how to create appropriate rubrics. Marc-Antoine, on the other hand, had a lot of expectations in terms of his fourth year because he felt had not received not enough information on evaluation, which made him concern whether he was "really ready to evaluate students."

1.3.2.3 Assessment knowledge acquired during the fourth year

As previously mentioned, pre-service teachers learn to teach in teacher education programmes based on their acquisition of knowledge, attitudes and skills through their observation of and participation in teaching situations (such as through their practica), and based on systematic reflection on these situations under supervision (Korthagen & Wubbels, 2001). Therefore, in the second theme, we grouped questions related to the knowledge acquired in their last year of teacher education, the kind of influence they received from their associate teacher and practicum supervisor and how they perceived reflections (daily reflections) on their practices.

When asked what they had learned in terms of assessment in their last teaching methods class, the participants struggled or were not able to identify direct/explicit contents covered in class that were linked with the assessment. For instance, Annabelle, who at first said that she had not learned much about evaluation in her class, changed her mind as she continued to speak and reflect on what she had actually seen. She realized afterwards that she did learn to assess in her last teaching methods course. Isabelle, on the other hand, named without hesitation an episode in which this course influenced her assessment practices. She affirmed that she remembers creating

> Different tests, like some tests were shorter than others and that is something that I really liked because I wasn't aware that we really could do that. So, it was to differentiate and adapt our learning situations to the students' needs. And I thought that that was very interesting that we were really able to do that... have weaker students do less questions than others, so they would be more... they would feel more encouraged because they would finish at the same time as others. So that is something that I learned in L.[25]'s class.

The only participant who affirmed that he did not learn anything was Carlos. According to this participant,

> I would say not much. I was disappointed because we have to teach a class to ourselves basically, and I don't think that we were prepared in any way. I don't think there was anything to grasp on and say "oh yeah, this was essential, this was necessary." And when I think back, I can't think back, there was nothing really... I can't remember what was about assessment, I think someone might have talked about assessment, but I can't remember. That is how important or crucial it was to me.

We also asked our participants what they learned in terms of assessment in their last practicum. Once again, their experiences also varied. Annabelle, for example, stated that she learned the importance of differentiating her assessments since teachers have students at different levels in their classes. Claire mentioned a website suggested by her associate teacher to create rubrics and Isabelle mentioned the use of projects to evaluate all her pupils' competencies. Once

[25] Fourth-year teaching methods course instructor.

again, the only student that claimed not having learned anything was Carlos who affirmed that he cannot recall learning anything important in his fourth year.

In terms of the influence of their associate teachers, the participants also seem to have had different experiences. Annabelle claimed that her associate teacher did not influence her much since he was rarely in class, which forced her to reflect on her own. Carlos also claimed to have received little influence. He stated that different from his previous practicum, in which he was able to "absorb and take things from her", he did things on his own during his final practicum. In addition, based on Carlos's statements, he did not appear to share the same beliefs about the purposes of assessment with his associate teacher. He stated that he felt that his associate teacher seemed to lack knowledge of what to do with the students' assessments as she would:

> Just give a student a grade. It was give a student a grade, and the data, information collected through the means of the exam, was... did not matter, like most teachers, they don't go over what they have just examined. They just "okay, I will give a test and you got 60 or you got 90, congratulations, or you have to work harder." And that is it. And not go over and say, "okay, well you know, the average was 70% or 75%, well maybe we should go over some stuff again... maybe not immediately, but maybe two weeks after the test." But that never happened. It was almost modular. You pass the module, congratulations, you move on to the next...

However, other participants did claim that they were influenced by their associate teachers. Mélissa, for instance, mentioned that she was influenced by her associate teacher who helped her maintain her level of self-confidence. Isabelle shared a similar experience. She claimed that her associate teacher helped her validate the grades she gave her pupils. Claire affirmed that her associate teacher was also a positive influence on her assessment knowledge as she received feedback on the many evaluations she was able to build. Marc-Antoine also described a similar experience as his associate teacher helped him create grids to evaluate his pupils' competencies.

We also questioned our participants in terms of the influence their university supervisor had on their assessment knowledge. Two participants out of six (Annabelle and Carlos) mentioned

that they were not influenced by their supervisor as he did not touch on the subject of evaluation very much through their practicum. For instance, Annabelle mentioned that her supervisor would give a lot of feedback on her classes, and since he did not come when she was evaluating, she did not receive any. However, the four others claimed that they did learn from their supervisor in terms of assessment mainly due to the fact that they were part of this study or that the researcher was their supervisor. Mélissa, for example, claimed that her supervisor helped her "pushing further our thoughts." Isabelle mentioned an example from her practicum in which her supervisor gave her a suggestion (an evaluation tool) during one of his visits. Claire and Marc-Antoine stated that since evaluation was the field of expertise of their supervisor, both were pleased to receive feedback after their visits or during the CARDECs[26] in which they would spend time discussing teaching and evaluating situations.

The final item of this theme was their perception of the role of reflections on their learning to teach. As previously mentioned, in the BEALS program, pre-service ESL teachers must write daily journals in which they are asked to reflect on their practices. Thus, our goal with this question was to see whether our participants would attribute their assessment knowledge acquisition to reflecting before, during or after an evaluation or an activity. Despite a few struggles such as time constraints and not being able to truly reflect on one's own, all participants seem to agree that reflection has an important role on a teacher's teaching practice. For instance, Annabelle stated that she progresses by reflecting on what she has created and when students ask her questions. Claire stated that she used reflections on her practices to share with her classmates and to see if others had ideas on what did not go well in her classes. In terms of how to reflect, Carlos believes that "the only way to reflect on it [one's teaching practice] is in at least in a team of two or in a group and discussing with other people because it is very hard to see your problem when you are directly there." Isabelle affirmed that despite sometimes lacking time to write her reflections due to her many teaching tasks, "taking the time just to sit down and just think and reflect really helped."

[26] As previously mentioned, CARDEC in English could loosely be rendered as "reflective monitoring seminar for the development of competencies.

We also asked our participants if they could name a new formative assessment practice acquired in their last year of teacher education. Among their answers, we can cite Annabelle's who stated that teachers must not base their judgment on only one assessment and that they should also observe their students' understanding instead of only relying on paper assignments and tests. At first, Carlos could not think of having learned anything new; however, after reflecting during the final interview, he was able to remember a tool (checklist) seen in his professional essay course that he could have used in his regular classes. However, he claimed that since this tool was introduced for another purpose (his action research), he could not make a link to assessment at the time. Mélissa also mentioned her professional essay course as a source of new knowledge. According to this participant, she learned the importance of keeping track of what she is teaching. Claire, on the other hand, attributed her last practicum as a source of new knowledge, as she was "able to try techniques such as asking questions to see if they understand." In addition, she mentioned giving grammar exercises to her pupils to keep track of their work. Isabelle also mentioned that she would give exercises to review new content seen in a previous class to make sure her students had grasped the new knowledge. Finally, Marc-Antoine claimed that he learned that asking his pupils questions was also a form of formative assessment.

1.3.2.4 Assessment practices during their last practicum

The third theme created was related to the participants' assessment practices. In this theme, we asked our participants to describe their first assessment and which change(s) they would make if they would give the same activity again. We decided to focus only on the changes they would make in their assessment practices in order to identify if our participants' practices had evolved (based on their description) and which elements influenced their evolution since the beginning of their practicum. Four out of our six participants stated that they would make some changes. Annabelle claimed that in her test, which took the form of a drill, she would have provided her students with more instructions after reflecting on the many questions her students asked during this activity. Mélissa mentioned that in her first test, she noticed that her pupils did not do so well so she

> would change the level... vary, not vary, but try to focus on key elements that really, like have a number that would be very easy, or a part of a number that it would be very easy and go from there, and really to see where the struggles are, to see the level of understanding.

Claire also mentioned that she would make changes in her first reading comprehension quiz. She stated that she would change certain questions because her questions were too general and not specific enough. The fourth participant who stated that she would modify her first assessment was Isabelle as she stated that she would add more pictures to the vocabulary section so as to differentiate it for her weaker students. As previously discussed, pre-service teachers are expected to learn during their teacher education programmes not only how to assess their pupils in the traditional summative (assessment of learning), but also how to assess in a genuinely formative way (assessment for learning). Therefore, based on Mélissa, Claire and Isabelle's statements, we can state that this was their case.

However, two participants mentioned that they would not make any changes in their first evaluation. The first one was Carlos who mentioned that his pupils did not do so well in his first reading comprehension exam simply because they were not used to it. Thus, he would not make any changes, but rather have them do the same time of activity more often. The second participant was Marc-Antoine. Since he had worked in collaboration with his associate teacher in the creation of this first assessment and they had already made some changes to this particular assessment before giving to their pupils, Marc-Antoine claimed that he would not make any changes. The fact that only Carlos and Marc-Antoine would not make changes to their assessment practices can be related to how they reflected on their practices and which professional development paradigm they adopted while on practicum.

1.3.2.5 Assessment purpose(s)

The next theme that we created was the assessment purpose(s). In this theme, we grouped two general questions related to assessment: why teachers should assess and which assessment tools teachers should use. As mentioned in chapter three, the goal of these questions was to identify

participants' beliefs about the purpose of assessment and their assessment knowledge and to compare them with their practice (what they had done during their practicum) as their stated beliefs and practice could differ (Pajares, 1992). In addition, a mismatch between pre-service teachers' beliefs and assessment practices could also lead to severe consequences such as low self-esteem and burnout (Sikka et al., 2007).

The first question of this theme was why teachers should assess. Four out of six participants (Annabelle, Carlos, Isabelle and Marc-Antoine) claimed that teachers should assess to verify students' understanding and knowledge. Two participants (Carlos and Claire) mentioned that it is to see if students meet the requirements established by the Ministry to move to the next level and two participants (Mélissa and Isabelle) mentioned that assessments are meant to keep track of students' learning (to identify elements that students are struggling with). However, three participants also mentioned more than one purpose for assessment in their answers. The first one was Carlos, who also believes that assessments should be used to determine if students have reached the level expected by the Ministry to go to the next grade. The second participant was Isabelle who also stated that assessments are "essential for teachers to see the development of students, where they are and where they are stuck also… So that is something that I really like." The third participant was Marc-Antoine who also believes that teachers assess to make a judgement at end of the school year and determine whether their students can move on to the next level and be able to identify the weak one and the strong ones.

Next, we asked our participants to list tools teachers could use to assess their pupils. Based on our findings, our participants are able to name many different tools. Among the traditional tools, we can mention Annabelle, who cited written productions and drills as some of the tools that worked well for her during her final practicum. Carlos cited rubrics to be used in writing, reading comprehensions or speaking. Besides citing traditional tools such as written quizzes and oral activities, Mélissa mentioned more alternative ones such as group talk, peer evaluation, peer assessment, self-assessments, games and online quizzes besides. However, Mélissa reported a negative experience with one type of interactive assessment (directive quiz) in one of her classes. According to the participant, her students were too excited during this assessment causing too much chaos in her class. For this reason, she decided not to use it anymore with that particular

class. Although Claire did not mention an actual tool, she stated that she would assess her students using a lot of different tools "to really to try to get a better perspective and try different things." Isabelle also mentioned another type of alternative assessment that she would use in her practice. According to Isabelle,

> Questioning is a great one because when you question, you find answers, you get answers from the students and that's how you can see where and how you can help them and... that is...and that's... I think that's the best one.... because we can see where the students are getting stuck. And when they would have an assignment, like I said I would come back with them individually on it...sometimes I would do it in groups, because I would see that everyone did not understand, and I would use visuals and I would use pictures and everything you could find in the class, like objects...it is really real for them and they can maybe see or touch...so they understand better.

1.3.2.6 Assessment readiness.

The final theme was made of one single question. We asked our participants at the end of their fourth year, after taking all practica and teaching methods classes, if they were feeling ready to assess their students. It seems that our participants have mixed feelings in that matter. Mélissa, for instance, answered that despite feeling ready, she also believes that there is still a lot to learn in terms of assessment. Claire shared a similar opinion. Besides feeling more comfortable to assess and give feedback to a class due to opportunities that she had been given in her last practicum, Claire still wants to work on her assessment skills. Isabelle also attributed her increase of confidence to assess to her practicum experience. According to the participant, she feels more confident because she knows now exactly what to do in terms of assessment or who to ask in case she has questions.

However, other participants claimed not being sure or not feeling ready to assess according to the Ministry's instructions. Carlos affirmed that despite being a confident person, he would not be able to justify a grade to a parent based on the Ministry documents (such as the Quebec Education Program (Gouvernement du Québec, 2001a, 2006a and 2007a) or the

Progression of Learning (Gouvernement du Québec, 2009a and 2010a). Annabelle, who answered that she is not sure, claimed not feeling completely at ease to evaluate her students probably due to lack of experience. Marc-Antoine, who was also hesitant in his answer, stated that despite all the practica he had, he was never given the opportunity to make his own decisions about evaluating his students.

In conclusion, this chapter provided our results obtained from the analyses of our data collection tools. In the first main section of this chapter, we presented our participants' initial beliefs related to formative assessment collected from a questionnaire and a semi-structured interview. Based on the questionnaire, we were able to identify that at the beginning of their fourth year, all our six participants believed that assessments should be used as a tool to make learning explicit and as a tool to promote learning autonomy. These beliefs were later supported by our participants' answers and statements provided in our initial semi-structured interview. Among their beliefs, we saw that all participants answered that students should be at the center of the teaching and learning process, which supports their initial beliefs (assessments to making learning explicit and to promote students' autonomy). In the second main section of this chapter, we presented our participants' beliefs and practices related to formative assessment while they were on practicum based on two data collection tools: a narrative and a stimulated recall session. Through our participants' narratives, we also saw that all the participants acknowledged the importance of using formative assessment to get to know their students and to adapt their practices to match their students' needs based on how they described their in-class interactions with the students and other teaching staff (personal and social interaction – Clandinin & Connelly, 2000). During the stimulated recall session, we were not only able to identify some of our participants' formative assessment practices (planned formative assessment and interactive formative assessment – Cowie & Bell, 1999) but also inquiry about the origins of their knowledge. Despite being able to name the courses in which they learned to assess, 5 out of the 6 participants were not able to track the precise origin of their assessment knowledge. Finally, in the last section of this chapter, we presented our participants' beliefs and practices related to formative assessment based on the analysis of their final questionnaire and second semi-structured interview. In the final questionnaire, we saw despite a few changes in their answers, their beliefs related to their conceptions of assessment remained the same: all our 6 participants believed that assessments

should be used as a tool to make learning explicit and as a tool to promote learning autonomy. During the final semi-structured interview, we questioned our participants on what had changed/evolved in terms on their formative assessment knowledge during their fourth and last year of teacher education. Among our findings, we saw that all participants agreed that reflection had an important effect on their teaching practice. In addition, we saw that despite having had opportunities to assess and reflect on their assessment practices during their final year of teacher education, our participants had mixed feelings in terms of feeling ready to assess their future pupils.

In the next chapter, we will examine our findings and we will answer our research question and sub questions based on our review of the literature and conceptual framework. In addition, we will discuss the limits of the study, make recommendations for teacher educators and for future research on this topic.

CHAPTER 5 – DISCUSSION OF THE RESULTS

1.1 The Evolution of Pre-Service ESL Teachers' Beliefs and Practices Related to Formative Assessment

In this chapter, we will we will examine the evolution of our participants' beliefs and practices related to formative assessment and respond to our research questions through reflecting on the analysis we presented in chapter four. Therefore, in this first part of the chapter, we will discuss how our participants' formative assessment beliefs and practices identified in the previous chapter influenced their professional development. In order to do so, we first compared our participants' assessment practices during our stimulated recall session and narratives with their prior beliefs (questionnaire and first semi-structured interview). In addition, we analysed our participants' assessment practices using Altet's (2008) professional development and approach to practicum and Vanhulle's (2009a) professional development model because these models provide an overview of how pre-service teachers acquire knowledge based on their beliefs and actions (while on practicum).

In the second part of this chapter, we will examine and list five elements that we have identified that influenced the evolution of our participants' beliefs and stated practices. These elements are: (a) prior beliefs; (b) their associate teacher's role and support; (c) their university supervisor's role and support; (d) their fourth year teaching methods course; and (e) reflections. These elements were selected based on the analysis of how pre-service teachers' beliefs and stated practiced related to formative assessment evolved, as identified in our study. In terms of our participants' prior beliefs, we classified and divided them into three categories: (a) conceptions of teaching; (b) how pre-service teachers learn to teach; and (c) their expectations for their final practicum. Moreover, in order to analyze our participants' prior beliefs, we also used Fives and Buehl's (2012) definitions and characteristics of beliefs (implicit and explicit, stable or dynamic, situated or generalized, and linked to individual propositions or larger systems) as these definitions and characteristics clearly represented some of the possible types of beliefs pre-service teachers could have while on their practicum.

1.2 Pre-service Teachers' Beliefs and Stated Formative Assessment Practices

In this section, we first provide a description of each participant's stated formative assessment practices from the stimulated recall interviews. Then, based on their stated beliefs identified in both questionnaires, we will triangulate our findings to define how their beliefs and practices evolved throughout their fourth year. In order to do so, we will classify our participants' practicum paradigm and professional development approach based on Altet (2008) and Vanhulle's (2009a) models by analyzing how they claimed to have acquired knowledge throughout their fourth year. As will be presented in this chapter, studying pre-service teachers' practicum paradigm (Altet 2008) and professional development approach (Vanhulle, 2009a) not only helped us identify their prior beliefs and practices related to formative assessment but also determine how (and whether) these beliefs and practices evolved throughout their fourth year of the teacher education programme.

1.2.1 Annabelle: Differentiated quizzes to meet students' needs along with peer evaluation and correction

One of Annabelle's assessment practices identified during both our stimulated recall session and narratives was that she would differentiate her quizzes (have different types of quizzes with different questions according to the level of her students). When questioned where she learned to differentiate her assessments, Annabelle answered that it was by reading and reflecting on some of the pupils' answers that she noticed that many of them were struggling to complete the same activity. In addition, she also stated that if she were to redo her first assessment again, she would provide her students with more information in the instructions. She would also take into account the questions that some of her students were asking while doing the activity.

This practice matches her stated beliefs about the purpose(s) of assessment identified in both questionnaires at the beginning and at the end of her fourth year. In the previous chapter, we saw that Annabelle strongly agreed that teachers should use assessments to: provide evidence of learning to influence their planning (item 1); to clarify learning objectives, lesson purposes and success criteria (items 11, 21, 25 and 28). All these items are characteristics of assessments as a

tool to make learning explicit. Therefore, by the use of differentiated quizzes to meet students' needs, Annabelle's beliefs were solidified and confirmed and they remained unchanged throughout her fourth year. However, we also found that she had, in fact, learned about this practice in her final teaching methods' course, which took place before her practicum. As presented in our previous chapter, when asked during our second semi-structured interview what she had learned in terms of assessment in her last teaching methods class, although Annabelle answered "not that much", she changed her answer when she realized that she had, in fact, learned how to differentiate her assessments depending on her pupils' abilities and to modify these assessments according to her pupils' levels. This finding highlights the importance of providing pre-service teachers with opportunities to link the knowledge acquired in their on-campus courses with their practicum experiences to bridge the gap other researchers have identified in the past (Nias, Southworth & Campbell, 1992).

Annabelle's second assessment practice identified during her last year of teacher education was the use of peer evaluation and correction. While on practicum, when asked during our stimulated recall session why she was using peer evaluation and correction, she replied that she had seen her associate teacher use it, so she thought it was worth trying in her own classes as well. It is important to mention that Annabelle also stated during her first semi-structured interview that her associate teacher had given her complete freedom to try whichever methods and approaches she wanted while teaching.

When asked in item 29 of our initial questionnaire whether students should be given opportunities to assess one another's work, Annabelle answered that she was undecided. In her opinion, peer evaluation was a good method and, despite using this tool to make her pupils participate, she still questions the pertinence of her pupils' comments. The fact that she uses her method even though she is not sure of its relevance can be attributed to her associate teacher's practice. As previously mentioned, while on practicum, pre-service teachers tend to mirror their associate teachers' practices when they are not sure how or simply because they fear failing their practicum in case they do not adopt the same teaching methods and approaches. Once again, Annabelle's assessment practices match her beliefs of using assessments to promote learning autonomy identified in both questionnaires.

Thus, we can infer that Annabelle adopted a professional approach and a biological paradigm (Altet, 2008) during her fourth year since she decided to try new teaching methods and approaches learned in her university classes and in her practicum despite doubts and uncertainties regarding some of these methods. However, since pre-service teachers tend to adopt only the knowledge that makes sense to them (Vanhulle, 2009b), we can link the fact that Annabelle did not like the use of peer evaluation and correction to her prior beliefs. In other words, Annabelle learned both to differentiate and to use peer evaluation and correction in her last year of teacher education, but only stated liking the first practice because it made sense to her and matched her prior beliefs. Trying out peer evaluation because she saw her teacher model it was not enough to convince her that it is a practice worth adopting. These findings corroborate Altet's (2008) conclusion that in order to bridge the gap between theory and practice, pre-service teachers should adopt a biological approach to professional development in which they view the knowledge acquired in their teacher education programme provides them with a series of tools that they could use according to different situations they encounter in their teaching careers.

Moreover, our findings also corroborate Vanhulle's (2009a) three requirements for professional development. Firstly, teacher education programmes should provide pre-service teachers with knowledge that is coherent with the needs and realities of the educational system. For instance, after learning how to differentiate her activities during her university classes, Annabelle was able to transfer this new knowledge into her assessment practices to fit her students' needs. Secondly, Vanhulle (2009a) also believes that teacher education programmes should be seen as a place of collective construction. We believe that this was also the case for Annabelle. Throughout her fourth year of teacher education programme, she was not only provided with knowledge that made sense to her, but she was also helped by her associate teacher by giving her freedom to try her own teaching methods which made her see herself as responsible for renewing the educational culture. Finally, the third requirement is that teacher education programmes should provide pre-service teachers with opportunities to acquire and transform knowledge collectively such as with associate teachers, supervisors and teacher educators and individually through reflexive practice. In Annabelle's case, we believe that this was made possible through her daily reflections (reflection on action, Schön, 1983) and by discussing with her associate teacher.

However, as Vanhulle (2009a) also stated, our findings also highlight the influence of pre-service teachers' beliefs and prior experiences on their professional development. In Annabelle's case, we could clearly notice the influence of her prior beliefs in the fact that despite adopting a new teaching method (peer correction) learned at university and while on practicum (based on her associate teacher's practice), she was still not sure about it. This was not observed in terms of differentiated activities and assessments which matched her prior beliefs, as we identified in her questionnaires. Therefore, Annabelle's beliefs and practices related to formative assessment mainly evolved by having adopted a biological approach to professional development as she would reflect and try new practices based on knowledge learned during her university courses and during her practicum. Her beliefs and practices related to formative assessments evolved throughout her fourth year as they were either reinforced, validated or (co)constructed. As will be discussed at length later in the chapter, reflection on action (Schön, 1983) was one of the important elements that we identified in our study that influenced how pre-service teachers' beliefs and practices related to formative assessment evolved.

1.2.2 Carlos: Assessing students through questions and dictations

As discussed in the previous chapter, two of Carlos's formative assessment practices were asking his students questions after explanations and the dictations. According to Carlos, the source of his knowledge was his previous experience teaching adults through "trial and error" and from his mother, who was also a teacher. When questioned if he had learned anything new during his last year of teacher education, Carlos answered negatively claiming that he did not learn any new tool, new idea or concept that could have improved his teaching skills. According to this participant, the only new assessment knowledge Carlos acquired took place during our data collection phase. During our second semi-structured interview, in which he was given the opportunity to reflect on what he had learned during his fourth year, Carlos was able to make a link between a new tool (a checklist) seen in his Professional Essay class with his practices.

Based on Altet's (2008) professional development model, we can classify Carlos's knowledge acquisition as the intellectual approach to knowledge, in which pre-service teachers acquire knowledge based on their taste, curiosity and pleasure of learning. The main problem with

this approach is when the pre-service teacher believes he has acquired all the necessary knowledge to teach, he or she might simply ignore any new knowledge that he or she will be exposed to. Consequently, this person will have the feeling of not having learned anything new, which was the case of Carlos. As a consequence of having adopted this approach, Carlos felt that he did not learn anything related to assessment which gave him the feeling that his fourth year was a waste of time. Therefore, to avoid these situations, teacher educators should help pre-service teachers identify and interpret the effects of their prior beliefs on their learning to teach process (Bullock, 2011) and help them unlearn "some long-held ideas, beliefs, and practices, which are often difficult to uproot" (Cochran-Smith, 2003, p. 9). Since this was not the case for Carlos, his beliefs and practices related to formative assessment were simply reinforced as they remained unchanged during his fourth year.

In addition, based on Carlos's statements and practices, since he was not able to transfer/apply any of his new assessment knowledge to his practice, we can classify his approach to practicum as the technological paradigm (Altet, 2008). As previously mentioned, pre-service teachers following this approach see their practices as a predetermined response to a predefined professional situation. One of the possible reasons why Carlos adopted a technological paradigm is that some of the knowledge advocated in his courses did not make sense to him (Vanhulle, 2009b), or it did not match his prior beliefs. As previously stated, prior beliefs have been known to block out or filter program experiences that are cognitively incompatible with these prior beliefs (Calderhead, 1996; Freeman & Johnson, 1998; Holt-Reynolds, 1992; Wideen et al., 1998). Therefore, despite the literature's recommendation to teacher educators to challenge pre-service teachers' beliefs and practices, it seems that Carlos had his prior beliefs validated and reinforced in some of his university classes. For instance, as Carlos mentioned in his stimulated recall session, he had the use of dictations validated by one of his university professors, which probably reinforced, even more, his prior beliefs and practices. Therefore, without seeing the need of having their beliefs and practices challenged, pre-service teachers end up either keeping their own practice or reproducing their associate teachers' practices and not improving (evolving) their teaching skills. As suggested by Nias, Southworth and Campbell (1992), some of the possible ways to counteract this phenomenon could be to organize meetings and small group activities to promote discussions. However, as previously mentioned, BEALS students do have opportunities to reflect

in small groups entitled CARDEC, and during methods courses. It seems that only providing Carlos with these meetings were not enough to make him see the need for challenging his prior beliefs and practices. Thus, Carlos's beliefs and practices related to formative assessment did not evolve during his last year of teacher education but they were rather reinforced since he only reproduced his previous practices. Based on our data collected, we can affirm that Carlos's beliefs did not evolve as he did not find the need/importance to have them changed/challenged as they were validated by his school experience (while on practicum) and by some of his professors (while on campus).

Our findings corroborate other studies found in the literature in which initial teacher education programmes had little influence on pre-service teachers' classroom practices either due to lack of time to clearly grasp the great amount of content covered in the program (Kosnik & Beck, 2009) or the "the tacit, unexamined effects of the apprenticeship of observation" (Bullock, 2011, p. 20). In order to overcome these issues, teacher educators should help pre-service teachers "name and interpret how the effects of their apprenticeships of observation contribute to their default assumptions about teaching and learning" (Bullock, 2011, p. 20) and provide opportunities to unlearn prior beliefs and practices (Cochran-Smith, 2003). In terms of the implications for teacher education programmes, these findings show that providing pre-service teachers with opportunities to reflect and challenge their beliefs and practices might not be enough for some pre-service teachers. We believe that teacher educators should not only acknowledge pre-service teachers' prior beliefs and previous teaching experiences when preparing and teaching their courses but they should also help pre-service teachers challenge these beliefs while on practicum by working in collaboration with associate teachers and university supervisors. Some of the possible ways would include: providing associate teachers with detailed descriptions of the content covered in each course pre-service teachers undertake at the university each semester; having some of the teaching methods courses integrated in their practicum (Boyle-Baise & McIntyre, 2008; Feiman-Nemser & Beasley, 2007; Kitchen & Petrarca, 2016; Zeichner, 2010); providing pre-service teachers with guiding questions to help them reflect on their practices and how to transfer the knowledge learned during their university classes to their practicum; and by helping pre-service teachers try new teaching methods and techniques besides the ones they are already comfortable with (challenge their beliefs and practices) while on practicum.

1.2.3 Mélissa: Assessments are tools to help students progress, planned questions planned questions are good ways to verify acquired knowledge and weekly formative tests

We identified three stated assessment practices during Mélissa's fourth year of teacher education. The first one was identified during our stimulated recall session and it was the use of weekly assessments to keep track of her students' progress and adapt her classes to follow her students' progression. When questioned about the source of this knowledge, Mélissa answer that it was from her third-year teaching methods class. We also found a similar practice in her narratives in which she described weekly evaluations to evaluate her pupils' progress and understanding. Moreover, this assessment practice corroborates her beliefs identified both at the beginning and at the end of her fourth year, in which assessments are seen as a tool to improve the teaching and learning process (Brown, 2004).

The second assessment practice was the use of planned questions to keep track of her pupils' learning. As described in our previous chapter, when preparing her classes, Mélissa also prepares the questions she will ask her pupils to make sure of their understanding. A similar practice was also described in her narrative, in which Mélissa claims to ask her pupils questions to reinforce knowledge and understanding. In terms of the source of this knowledge, this time Mélissa was not sure whether she learned by herself (by reflecting and putting herself into her pupils' shoes) or at the university.

At the time of our second semi-structured interview, Mélissa had started a teaching contract. Thus, since she was not given many opportunities to assess her pupils during her practicum, we decided to ask her to describe one of her assessment practices in her contract, which immediately followed her practicum, although it was in a different school. The assessment practice that she chose to describe was the use of weekly content tests in which she would use the students' results to evaluate their understanding and to regulate her teaching. According to Mélissa, the source of her practice came from her third-year practicum, in which her associate teacher used weekly tests.

In terms of assessment knowledge acquired in her fourth year of teacher education, Mélissa mentioned that in her last teaching methods' class, she learned that there are many types of learning situations that teachers could use in order to assess. In addition, she also stated that in her Professional Essay course, she learned about the importance of collecting students' assignments (to keep proof of their progress and the contents taught) and making sure her teaching purposes and goals matched her practices. Therefore, by being able to apply the new knowledge acquired during university courses in her practices by taking a step back and reflecting on how this new knowledge could be used in the classroom, we can state that Mélissa adopted Altet's (2008) professional approach to knowledge.

In terms of her adopted paradigm, based on Altet's (2008) study, we can conclude that Mélissa adopted a biological paradigm as her assessment knowledge seemed to have been constructed by taking risks, by experimenting and testing new situations (assessing adults for the first time) and through reflexive practice. We believe that this was also possible mainly because she could relate to the new knowledge acquired during her fourth year as it made sense to her (Vanhulle, 2009b). Thus, we can affirm that Mélissa's beliefs and practices related to formative assessment evolved by being validated and (re)constructed during her fourth year of teacher education.

These findings once again highlight the impacts pre-service teachers' prior beliefs can have on their professional development. Different from Carlos, Mélissa's prior beliefs matched the new knowledge being advocated in her courses and practicum, which allowed her to transfer and incorporate this new knowledge related to formative assessment into her practices. Other elements that contributed to the evolution of her beliefs and practices related to formative assessment were the support she received by her associate teacher and university supervisor as she claimed to have helped her push her knowledge further and reflect on her practices. Moreover, despite being opened to try new practices suggested and already used by their associate teachers, our findings indicate that during their fourth practicum and beginning of their career, pre-service teachers will either reproduce their associate teachers' practices or they will tend to validate and reinvest on the knowledge and practices previously acquired that matched their beliefs. Thus, in order to find out more about the impacts of teacher education programmes on how pre-service

teachers' beliefs and practices evolved, we should also study their beliefs and practices once they graduate and have their own classes. In Mélissa's case, she kept an assessment practice learned in her third-year practicum that probably matched her prior beliefs.

These findings also indicate the importance teacher educators, associate teachers and university supervisors have to help pre-service teachers not only to reinforce practices they are already comfortable and familiar with but also try new ones. According to Le Cornu and Ewing (2008), while on practicum, pre-service teachers tend to adopt a traditional orientation in which they would see the practicum as a place to put their university acquired knowledge into practice but by adopting a safe approach. However, we also believe that teacher education programmes should be aiming to promote what the literature calls "communities of practice" (Wenger, White, Smith & Rowe (2005) or "learning communities" (Le Cornu & Ewing, 2008) in which pre-service teachers' practicum experiences is seen as a collaborative space to develop each other's reflection skills. Moreover, Le Cornu and Ewing (2008) state that in a learning communities approach,

> student teachers have time and space structured into their professional experiences to engage in learning relationships with a range of colleagues, including their peers, mentors, other school-based colleagues and university liaison. Such relationships are characterised by trust and reciprocity with a strong appreciation of the critical nature of professional conversations for ongoing professional learning. Where professional experiences are framed around learning communities there is the potential for student teachers to be involved in more team teaching and shared risk taking rather than individual teaching and individual risk taking. (p. 1803)

Although the above-mentioned description corroborates the approach advocated by the Université de Sherbrooke, through our experience as a researchers and teacher educators, we have witnessed resistance in terms of pre-service teachers engaging with each other's professional development. As previously mentioned, our pre-service teachers have opportunities and spaces (online forum discussions) to share exchanges during their practica. Despite also being encouraged to engage in in-depth discussions on some of the events they experience during their practicum (through their reflective journals), many of them tend to simply describe the events that happened each day or

list their teaching activities. As Wenger et al. (2005) state, providing the space (technology) to foster communities of practice does not guarantee that the members (pre-service teachers) will be engaged in this practice. Based on our findings, we believe that the reason behind pre-service teachers' disengagement with this tool can be linked to pre-service teachers' prior beliefs. In other words, it is highly possible that some of our pre-service teachers believe that reflecting is only listing the activities that took place during their day or that writing reflections is a waste of time. Therefore, in order for teacher education programmes to be more effective, pre-service teachers should receive more support from their teacher educators, associate teachers and university supervisors in terms of having their prior beliefs and practices challenged so that they can unlearn their old assumptions, beliefs and practices (Cochran-Smith, 2003; McLauglin, 1997).

1.2.4 Claire: Planned questions to verify learning and keeping track of her pupils' mistakes

We identified two formative assessment practices during Claire's practicum. The first one was the use of formative planned questions after the explanation of new content. According to Claire, this was a technique acquired in one of her communication courses, in which she learned how to communicate and get prepared for communication with students and parents (give instructions, establish a communication contract, etc.). In addition, she also claimed that this technique was improved in her teaching methods courses, where she learned a variety of different approaches and also by talking to her supervisor, as he would help her reflect on her practices.

In terms of her second formative assessment practice, that is, keeping track of her pupils' progress through their mistakes, Claire stated that this was a knowledge acquired this year since the beginning of her practicum. According to Claire, she is now more aware of how her pupils improved as she was given the opportunity to evaluate more. In addition, Claire was also able to realize during her practicum that her students were making the same mistakes because she was not evaluating or checking their learning. Thus, we can state that her practice evolved due to the opportunities to assess that she was given during her fourth-year practicum. As she stated during our stimulated recall session, she was not able to assess her students in her previous practicum as it was too short to see her students' progress.

When questioned if she had acquired any new formative assessment knowledge in her last teaching methods class, Claire answered affirmatively stating that she learned how to build better assessment grids. Moreover, Claire stated that she was able to put her newly acquired knowledge into practice as she stated that whenever she had to build a new evaluation grid, she remembered "not to use too many words, to be specific and clear, focused on a small number of things" as seen in her last teaching methods class. However, Claire also stated that she learned more in her practicum than at the university because she was able to try techniques such as asking questions to check students' understanding, which she could not do in any of her university classes. Similar to Mélissa, at the time of our second semi-structured interview, Claire had also started a teaching contract. Based on her new teaching experience, Claire highlighted the importance of having better formative assessment training in a teacher education program. In her opinion,

> in terms of my university training, I don't think we spent a lot of time on formative assessment, which in the future it would be great if there was maybe it was included in the training of the other who will do the program eventually. It is a really good tool to see what your students understand without having the pressure to give the grade for them as well, without like feeling the pressure to give the good answer. I am also practising now that I am working, I like to ask questions to my students to see if they understand, what they remember let's say from one class to another, so...I always start my lessons like, "last week, what did we talk about" and then I try to get them talking and get them to remember before moving on to see where I stand and what I need to do next.

Thus, both practices corroborate her initial beliefs that assessments should be used as a means of making learning explicit. As seen in the previous chapter, when asked in both questionnaires (item 1) whether assessments provide teachers with useful evidence of students' understanding, Claire answered affirmatively twice, stating that teachers should know what students need to learn and that assessments could tell teachers what they need to focus on.

In terms of her professional development approach while on practicum, Claire stated that it was through reflections that she was able to improve her teaching skills. She described her reflections as something that she could always go back to, and sharing events from her class with

the members of her teacher education cohort helped her to learn from them as well. Based on Claire's statements in terms of the role reflections had on her professional development, we can affirm that she adopted Le Cornu and Ewing's (2008) learning communities orientation. Following this orientation, pre-service teachers are expected to learn to teach by collaborating in terms of helping each other reflect on their practices (Le Cornu & Ewing, 2008). Although all of our pre-service teachers are provided with the same opportunities to engage themselves in a learning community, Claire was the only participant of our study who mentioned having learned through her online reflexive journals and by sharing them and reading from her classmates' ones. Moreover, Claire's professional development approach is related to Altet's (2008) biological paradigm while on practicum as she constructed her knowledge by "experimenting and testing new situations, by taking risks, by looking for solutions to problem situations by oneself, and by developing reflective practice through one's own practice" (Altet, 2008, p. 100). Therefore, Claire's formative assessments practices evolved through her reflections, by making links between new knowledge acquired in her university classes with her practicum and by having more opportunities to assess her students. Once again, we believe that this evolution was possible since the new knowledge advocated in her final year of teacher education also made sense to her prior beliefs and practices (Vanhulle, 2009b).

Claire's findings also highlight the impacts of pre-service teachers' prior beliefs on their professional development. At the Université de Sherbrooke, while practicum, pre-service teachers are encouraged to interact with each other by sharing their reflections and asking questions about their concerns through their online reflexive journals and forum. However, seizing these opportunities seems to be conditioned to their prior beliefs and professional development approach. Furthermore, we agree with McLoughlin, Brady, Lee and Russell (2007) who state that the key elements to professional development are mutual engagement and reflection. These authors believe that these goals can achieved through "dialogue, a common focus and sustained interaction, and are achievable through a peer mentoring process in which dyads communicate, share ideas and support each other through reciprocity and offering feedback/advice" (McLoughlin et al., 2007, p. 10). In other words, while on practicum, pre-service teachers should be supported and encouraged by their associate teachers and university supervisors in to share teaching experiences, ideas and concerns with each other. By being engaged in such exchanges, pre-service teachers will

not only be providing each other with mutual support but they will also be helping each other acquire new practices and to unlearn old assumptions, beliefs and practices (McLaughlin, 1997).

In terms of the implications of these findings for teacher education programmes, we believe that pre-service teachers should not only be provided with opportunities to reflect and try new teaching methods and techniques, but they should also receive better support and guidance on how to actually implement these new methods and techniques and how to reflect on their practices. In other words, pre-service teachers need to receive clear instructions with examples of how they should interact and help each other reflect on their practices while on practicum. We also believe that this support must be given by teacher educators, associate teachers and university supervisors, otherwise, while on practicum, pre-service teachers will only reproduce their associate teachers' practices without making many connections to the knowledge/theory they have learned during their university courses.

1.2.5 Isabelle: Asking formative questions to validate learning, using videos to assess students and individual reinvestment exercises after explanations

We identified three assessment practices during Isabelle's fourth year of teacher education. The first practice was the use of formative questions to assess her students' knowledge. As seen during her stimulated recall sessions, Isabelle would ask differentiated questions (according to her students' level) to assess their progress. In her narrative, she also showed concern for her weaker students as she stated that when she assessed her students, she always thought about the weaker ones so she would adapt her evaluations in order to fit their needs. Isabelle claimed that she learned this practice with her associate teacher in her second-year practicum and by herself.

The second assessment practice was the use of videos to evaluate her students. According to Isabelle, this new knowledge was acquired in her fourth year Professional Essay class. Isabelle mentioned that she enjoyed using this tool as it would allow her to watch her students perform again and again to make sure she did not forget anything and that by using videos she could evaluate them justly. In fact, as will be presented in the second part of this chapter, this was one of her expectations in terms of knowledge to be acquired during her last year of teacher education.

In addition, Isabelle also stated that the use of projects was something new she learned during her final practicum. According to Isabelle, through different projects and the support of her associate teacher, she was able to assess her students' competencies in a creative way and by using different techniques.

Finally, she also used individual reinvestment exercises after explaining contents (e.g. grammar and vocabulary). During the stimulated recall session, we asked Isabelle why she would give reinforcement activities after explaining contents on the board (with many examples) and she stated that it was to verify if her students could actually reinvest what they had learned with her. In addition, she stated that sometimes, when students are alone, they tend to forget things, so this reinforcement activity was to see if they had really understood and if not, she would review it. Isabelle explained that she had learned this practice mainly on her own, despite also seeing this while on practicum and learning about it in one of her methods courses.

All these practices also corroborate her initial beliefs that assessments should be used to improve the teaching and learning process (Brown, 2004). As seen in the previous chapter, Isabelle also believes that teachers should place students at the center of their teaching. For instance, when asked if she would make any changes to the first assessment she gave her pupils while on practicum, Isabelle answered that she would have differentiated more to help her weaker students. In terms of the elements that influenced her practice, Isabelle claimed that it was all the classes that she had, discussions with her associate teacher and by reflecting on her own. According to Isabelle, despite being time-consuming, reflections helped her greatly to identify which of her practices were working with her pupils and the ones that needed improvement.

We can affirm that her final practicum did have an important impact on her practices. Furthermore, based on her beliefs and assessment practices, we can conclude that her beliefs and assessment practices evolved by adopting a biological paradigm since she seems to have constructed her knowledge by experimenting and testing new situations (projects, videos and reinforcement activities) and by developing reflective practice (reflecting on her own practice) (Altet, 2008). Moreover, the fact that she was able to make links between a tool seen in her

Professional essay course[27] that was not necessarily intended to assess her students' learning, shows us that Isabelle was aware of her own responsibilities in developing her professional knowledge, which corroborates Vanhulle's (2009a) model.

Based on Isabelle's findings, we can state that by being placed in a practicum context with an associate teacher who would not only provide her freedom and opportunities to assess her pupils based on her beliefs, but also support her in reflecting on her practices, Isabelle's beliefs and practices were able to evolve. Moreover, Isabelle was also able to reinvest some of her previous assessments and practices, which would consolidate and reinforce these beliefs and practices, and also try new teaching methods and approaches learned during her fourth year. Moreover, we believe that Isabelle was able to transfer new knowledge acquired during her fourth year mainly because this new knowledge matched her prior beliefs and practices as it made sense to her (Vanhule, 2009b). Therefore, these findings show us once again that in order to professionally grow, pre-service teachers must be provided with opportunities and freedom to teach and assess to try out their own techniques and methods learned at the university. In addition, pre-service teachers must be adequately supported in terms of how to reflect on their teaching process in order for their beliefs and practices to evolve.

Basturkmen's (2012) statement that "beliefs drive actions but experiences and reflection on actions can lead to changes in or additions to beliefs themselves" (p. 283) was true for Isabelle. Furthermore, we also agree with Calderhead and Gates (1993) who state that by promoting reflection, teacher education programmes will not only enable pre-service teachers to analyze, discuss, evaluate and change their own practices but it will also encourage them to take greater ownership of their own professional growth and professional autonomy.

[27] BEALS pre-service teachers also have a fourth-year course entitled Professional Essay in which they have to conduct an action research while on practicum.

1.2.6 Marc-Antoine: Formative assessments, questions and follow up exercises, keeping mental notes of students' mistakes and providing individual formative support

While on practicum, we identified three different assessment practices in Marc-Antoine's teaching. The first one was the use of formative assessments, asking questions and doing follow up exercises after his explanations. Marc-Antoine claimed that this practice originated from his practicum as he did not have any classes on this matter at the university. During his stimulated recall session, he also highlighted the importance of having students do many small formative assessments, asking them questions and working with follow up exercises to validate their learning.

The second and third assessment practices identified during his stimulated recall session was keeping mental notes of his students' mistakes and supporting students individually. Marc-Antoine was not able to provide a precise answer about the origins of these practices. He believed that it was either his practicum or some of his teaching methods classes. Despite believing that he should also write his students mistakes down in order not to forget them, Marc-Antoine claimed that he was still able to keep track of his students' mistakes and progress only mentally and that he would provide them with individual support by making sure they had indeed understood the content while doing reinvestment exercises. Marc-Antoine also stated that he would recommend his weaker students to stay after class or attend remedial periods (periods in which he would review the contents taught in class) and provide extra exercises. Therefore, Marc-Antoine's two practices corroborate his beliefs identified in his initial questionnaire, in which he stated that assessments should be used as a means of making learning explicit to improve the teaching and learning process.

When asked if he had acquired any new assessment knowledge during this fourth-year teaching methods class, Marc-Antoine claimed that despite not having had any specific assessment classes on how to evaluate his students, he learned "how to find different ways to help students, like with difficulties or with learning disabilities, like to be able to evaluate them, so let's say a different task or a different assignment and adding maybe more instructions, giving them more time." However, Marc-Antoine also stated that he was not able to differentiate his teaching during

his final practicum because he did not have any students with learning disabilities in any of his classes, which contradicts his previous answer (knowledge not only meant for students with learning disabilities). Therefore, Marc-Antoine's beliefs and practices related to formative assessment partially evolved throughout his fourth year of teacher education. In other words, although Marc-Antoine did acquire new assessment knowledge in his teaching methods course, he was not able to put this new knowledge into practice. Based on our findings, we believe that this was mainly due to his prior beliefs (expectations) that the knowledge taught during his university courses could be directly applied on practicum.

Moreover, Marc-Antoine's inability to identify and integrate assessment knowledge taught in the BEALS programme is similar to what happened to our participant Carlos. Once again, we believe that only providing Marc-Antoine with meetings during the CARDECs and group discussions in his teaching methods courses were not enough to help him challenge his prior beliefs and practices. Similar to what was observed with Carlos, Marc-Antoine also seems to have acquired his assessment knowledge during his practicum by following the technological paradigm as he would see his practices as a predetermined response to a predefined professional situation, as he was looking for explicit assessment knowledge in his last teaching methods course that would be directly applied into practice (Altet, 2008). An element that might have contributed to this fact was the lack of opportunities to build his own assessment tools such as evaluation grids. As he stated in the second semi-structured interview, Marc-Antoine was requested by his associate teacher to adopt the assessment grids created by the associate teacher for the assessments that were worth more points. Despite recommending associate teachers to provide pre-service teachers with freedom to try out new activities, assessments and teaching methods, we still encounter situations in which pre-service teachers are required to use all the material created by their associate teacher due to fear of compromising their pupils' learning or simply by personal choices.

As previously mentioned, teacher education programmes should not only to provide pre-service teachers with knowledge that makes sense to them, but also help them see themselves as responsible for renewing the educational culture (Vanhulle, 2009b). One way of accomplishing this goal is by fostering interactive tasks such as by giving pre-service teachers opportunities to acquire and transform knowledge collectively and individually (Vanhulle, 2009b).

Marc-Antoine's findings also have important implications for teacher education programmes. As previously stated, associate teachers must not only provide pre-service teachers with opportunities and freedom to teach assess but also support them on how to reflect on their practices and challenge their beliefs while on practicum since it is the best moment to make changes and additions to these beliefs. In other words, to avoid these situations, teacher educators should try to work more in collaboration with associate teachers (and university supervisors) by offering more guidance in terms of how to promote reflection in order to provide their student teachers with the best support.

2. THE ELEMENTS THAT INFLUENCED THE EVOLUTION OF PRE-SERVICE ESL TEACHERS' BELIEFS AND PRACTICES RELATED TO FORMATIVE ASSESSMENT

In this second section of the chapter, we will present some of the elements identified in our data analysis that influenced our pre-service ESL teachers' beliefs and practices related to formative assessment throughout their last year of teacher education program. Based on our data collection and analysis, we were able to identify five main elements that directly shaped their beliefs and practices related to assessment and formative assessment. These elements were: (a) prior beliefs; (b) their associate teacher's role and support; (c) their university supervisor's role and support; (d) the teaching methods course; and (e) reflections. In order to illustrate how each element had an impact on our pre-service teachers' beliefs and practices related to formative assessment, we will focus only on four of our six participants: Annabelle, Carlos, Claire and Marc-Antoine.

2.1 Prior Beliefs

As presented in our first chapter, pre-service teachers' prior beliefs and experiences shape, filter or block programme experiences (Calderhead, 1996; Freeman & Johnson, 1998; Holt-Reynolds, 1992; Wideen, et al., 1998). Moreover, as seen in our previous chapter, our participants began their fourth year of teacher education with a variety of prior beliefs about formative assessment. Some of these beliefs seem to have been formed during teaching experiences prior to the university, as a student (before or during the university classes), and during their previous

practicum experiences. As presented in chapter two, teachers' beliefs can be seen as stable and resistant to change (Gooya, 2007; Kagan, 1992; Pajares, 1992) or as fluid and dynamic (Lieberman, 1995; Graham, 2005; Peacock, 2001) and recently acquired beliefs are the ones most likely to change, as opposed to deep-rooted, cultural and educational beliefs (Gabillon, 2012; Pajares, 1992; Williams & Burden, 1997). Moreover, according to Gabillon (2005), beliefs can be classified into two categories: core beliefs and peripheral beliefs. As presented in our second chapter, identifying teachers' core beliefs helps to provide a framework to understand teachers' thinking processes and the pedagogical decisions that they make in their own classrooms (Gill & Hoffman, 2009). Defined as stable and enacted, core beliefs have a more powerful influence on teachers' behavior than peripheral ones (Haney & McArthur, 2002; Phipps & Borg, 2009). Initially, it was our intention to identify and classify our participants' prior beliefs either as core beliefs or peripheral beliefs. However, once we began collecting data, we noticed that it was not possible only based on their statements and actions during their practicum. In order to truly identify their core beliefs, it would have been necessary to also study their beliefs and practices during their first year as in-service teachers. Therefore, we decided to look at their beliefs as a whole, without determining whether they were core or peripheral. Thus, in this study, we have classified our participants' beliefs into three categories: (a) conceptions of teaching; (b) how pre-service teachers learn to teach; and (c) their expectations of their fourth practicum. In the following section, the beliefs as expressed by the participants are presented. These beliefs appear to be the ones that have had the most impact on the evolution of their practices from their own perspectives.

2.1.1 Conception(s) of teaching

The first category of beliefs that we identified concerns pre-service teachers' conceptions of teaching and learning. It is interesting to note that our students are regularly asked to describe their conceptions of teaching and learning in their portfolios. This exercise has the purpose of helping pre-service teachers identify important elements that influence the teaching and learning process, reflect on their own beliefs by making links with practicum experiences and with theory learned during their on-campus classes. As mentioned in chapter one, many studies have shown that pre-service teachers' prior beliefs and general conceptions of teaching and learning work as filters blocking out program experiences that are cognitively incompatible with these beliefs

(Calderhead, 1996; Freeman & Johnson, 1998; Holt-Reynolds, 1992; Wideen, Mayer-Smith & Moon, 1998). In addition, we also stated that these prior beliefs could also influence how pre-service teachers interpret the roles they and their students play in assessment practices (Dixon, Hawe & Parr, 2011) which impact how they acquire (or not) new knowledge. Furthermore, Barahona (2014) claims that pre-service teachers "use their beliefs about teaching and language teaching to direct their actions, which in the end they developed into concepts about language teaching and learning" and that these beliefs emerge as pre-service teachers "are engaged in learning to teach and in the interplay between theory, personal understandings and practical applications" (p. 120). Therefore, we will present in this section how Annabelle, Carlos, Claire and Marc-Antoine's beliefs of conceptions of teaching are likely to have influenced the evolution of their assessment practices.

As presented in the previous chapter, at the beginning of their fourth year of the teacher education programme, all participants believed that teachers should place their pupils at the center of their teaching and be ready to adapt their teaching to fit student needs. In addition, our data shows that all of them also put this belief into practice during the practicum. For instance, during her stimulated recall session, Annabelle claimed that at the beginning of every week, she would start her class by doing a review of the content her students had seen so far in order to make sure no one had any questions or doubts. In addition, when describing how she proceeded with one of her formative assessment practices (a weekly verb test), she also stated that she used it to assess her pupils' knowledge about verbs. If she finds that they do not understand something, she would review it. Thus, based on our findings, we can classify Annabelle's conception of teaching as explicit and dynamic since her conception was probably reinforced by gathering factual information such as the new assessment knowledge acquired during her fourth year that she was able to put into practice (Wilcox-Herzog et al., 2014). Therefore, Annabelle's teaching experiences in her fourth year confirmed both her conception of teaching and also confirmed and solidified her beliefs and practices related to formative assessment.

Carlos also seemed to have promoted this belief while he was on practicum. When asked during the stimulated recall session why he would ask students questions before teaching new content, Carlos stated that he wanted to put them on the spot to see if they had understood, if they

knew the subject ahead of time or if they were able to explain it in their own way. Carlos' conception of teaching was possibly formed during his previous teaching experiences before the university and instead of being challenged, some of his prior beliefs were rather validated in his university classes, (the use of dictation and his belief about the use of assessment in today's classrooms). Thus, without having had the opportunity to reflect on these beliefs in his last teaching methods class or in his last practicum, Carlos's new knowledge ended up being washed out by his previous practice (Zeichner & Tabachnick, 1981). Therefore, Carlos's conception of teaching can be classified as implicit and stable. As previously mentioned, implicit beliefs are not only stable and slowly constructed through experience (Wilcox-Herzog et al., 2014) but they also guide and filter teachers' actions about teaching experiences without their awareness (Fives & Buehl, 2012). In addition, since implicit beliefs cannot be influenced by individual reflective practice (Nespor, 1987), as many authors highlight, Carlos's beliefs and practices would only evolve/change if he had been given more opportunities and support by his associate teacher to challenge and reflect on the impact of his beliefs on his practices while he was on practicum (Borg, 2003; Hollingsworth, 1989; Nias et al., 1992).

Claire's prior conception of teaching was also observed in her practices. As previously seen in this chapter, Claire stated during her stimulated recall sessions that she would check her students' understanding by preparing questions ahead of time (planned formative assessment) and by taking notes of her students' mistakes, which also matched her prior conception of teaching. However, Claire also stated in the stimulated recall sessions that during her practicum, besides using a few formative assessment practices, her associate teacher required her to assess her pupils using mainly summative assessments, which was a practice that did not match her conception of teaching. According to Claire, if she could have chosen her own assessment approach in her final practicum, she would have done more formative exercises. Thus, Claire also stated in her narratives that once her practicum finished and she started her own teaching contract, she switched to an approach that mixed both formative and summative assessments, which matched her beliefs. According to the literature, Claire's conception of teaching belief can be classified as flexible and context-independent (Fives & Buehl, 2012; Hermans et al., 2008) since it remains unchanged despite the mismatch with her associate teacher's beliefs and practices. If unaware of their responsibilities, associate teachers might believe that their role is only to focus on transmitting

techniques and tips associated with what they believe to be effective practices, instead of questioning and challenging pre-service teachers' own beliefs and practice (Zeichner, 2005). As previously mentioned, teacher educators should try to look for different options to increase the support given to associate teachers to help them better understand their role and to provide pre-service teachers with the best guidance and support. Online options should be considered for associate teachers who struggle with heavy teaching loads and lack time. Therefore, based on her assessment practices after her practicum, we can state that Claire's prior beliefs about teaching influenced her assessment practices and were solidified in her fourth year.

Finally, Marc-Antoine's assessment practices also matched his conception of teaching as we stated during his narrative that he did a lot of formative assessments during his practicum to identify what his students were struggling with. Marc-Antoine also mentioned during his stimulated recall session that through a grammar review, he was able to notice that some of his weaker students were still struggling with the content that he had taught, so he told them to come to the remedial sessions. Thus, similar to what happened to other participants, Marc-Antoine's prior conception of teaching evolved by being validated by his practices, which helped solidify his prior beliefs and practices related to formative assessment. Therefore, we can classify Marc-Antoine's prior conception of teaching as stable and resistant to change (Gooya, 2007; Kagan, 1992; Pajares, 1992). However, as previously mentioned, Marc-Antoine was not given many opportunities to try his own assessment tools with his pupils. As stated by Basturkmen (2012), "beliefs drive actions but experiences and reflection on actions can lead to changes in or additions to beliefs themselves" (p. 283). Therefore, had he been given more opportunities to create and test his own assessment practices and received more support on how to reflect on his beliefs and practices, we believe Marc-Antoine's beliefs related to formative assessment would have evolved even more.

Our findings highlight the impacts pre-service teachers' prior beliefs can have on their professional development. As previously stated, educational beliefs such as conceptions of teaching can be classified as deep-rooted which are hard to change and evolve (Gabillon, 2012; Pajares, 1992; Williams & Burden, 1997). However, as Basturkmen (2012) states, pre-service teachers' beliefs are likely to change/evolve through teaching experiences and reflections.

Therefore, in order for pre-service teachers' practices and beliefs to evolve, teacher educators, associate teachers and university supervisors must work in collaboration to help pre-service teachers identify and challenge their beliefs. In addition, we believe that at the beginning of their courses and practica, teacher educators, associate teachers and university supervisors should not only help pre-service teachers identify their own prior conceptions of teaching and the impacts these beliefs could have on their professional development but also take these same beliefs and previous experiences into consideration while teaching their courses and supervising their student teachers. For example, to identify pre-service teachers' stated beliefs, teacher educators could create a questionnaire with statements that focus on the main content/aspects of the courses. Associate teachers, could also create a questionnaire addressing teaching and learning styles and the roles associate teachers and pre-service teachers have during a practicum. Based on our findings, we can state that only providing pre-service teachers with opportunities to teach and reflect is not enough for some of their stated beliefs and practices related to formative assessment to evolve. Pre-service teachers must also be guided by their associate teachers and university supervisors on how to identify and challenge their own beliefs and reflect on their practices in active, critical ways. Thus, by receiving the appropriate guidance and support, we believe that pre-service teachers will be able to learn new practices and unlearn deeply-rooted prior beliefs and practices (Cochran-Smith, 2003).

2.1.2 How teachers learn to teach and assess

The second category of prior beliefs that we identified concerns how pre-service teachers learned to teach and assess learning. As previously stated, pre-service teachers' prior beliefs also include their conception of learning that could also filter and block out their program experiences (Freeman & Johnson, 1998; Wideen, Mayer-Smith & Moon, 1998). Based on the analysis of our participants' prior beliefs about how they learned or expected to learn in their teacher education programme identified in our first semi-structured interview, in this sub-section we will present the impacts of these beliefs on their practices.

Based on our findings, we can state that all of our participants had different beliefs in terms of how teachers learned how to teach and that these beliefs had a direct impact on their

professional development. For instance, Annabelle stated in her first semi-structured interview at the beginning of her fourth year that she believed that teachers learned to teach by practicing and that she had mainly acquired her knowledge through her practica because feedback from her associate teachers and university supervisors was the most important thing she received in her teacher education program. Moreover, Annabelle's belief about how teachers learn matched her assessment practices and biological practicum paradigm described earlier in this chapter. For instance, during her stimulated recall session, she acknowledged trying a technique used by her associate teacher (peer correction) and another one learned in her third-year practicum (asking questions before doing an activity). However, when also asked about which elements influenced her learning the most in her stimulated recall session during her practicum, this time Annabelle answer both her practicum and her university classes. As previously seen in this chapter, this was not the only moment in which Annabelle seemed not sure about the origin of her knowledge. When asked whether she had learned something related to assessment in her last methods class during her second semi-structured interview, Annabelle first answered no, but then corrected herself as she recalled what she had learned in this class and what she had learned during her practicum. This might indicate that Annabelle changed her answer regarding the source of her knowledge during her practicum as she was given many opportunities to reflect on her practice through the requirement to keep a daily reflective logbook.

In terms of Carlos's prior beliefs of how teachers learn to teach, we saw that he believes that a person becomes a teacher not necessarily by receiving any diploma or an accreditation but rather the minute he or she decides to be one. In terms of the elements that mainly influenced his knowledge acquisition, Carlos mentioned his writing and grammar classes as he believes that

> once that is settled [grammar and writing knowledge], once it is in the back of your mind…you know…you got it right there, then you can really focus on teaching. And once the curriculum is settled, then you really get to practice what it is important and you know, becoming, not a better person, but a person who listens to the students and who is aware of what it is happening in the classroom.

However, it seems that during his practica, Carlos adopted a technological approach (Altet, 2008) by only using assessment practices that he was already using and claiming not being able to acquire or apply any new knowledge into his practices. As a consequence, Carlos had the feeling that his fourth year was a waste of time in terms of learning more about assessment. Thus, Carlos's prior belief about learning to teach did not evolve or change throughout his fourth year of teacher education. Once again, we highlight here the importance of providing pre-service teachers with opportunities and support to help them become aware of the impacts of their own beliefs on their practices and thus to improve their teaching.

During Claire's first semi-structured interview, we identified two distinct beliefs related how teachers learn to teach. Claire believes that someone becomes a teacher by acquiring important knowledge (e.g. child psychology) and techniques to teach, which she believed were lacking in her teacher education programme. Moreover, Claire also stated that the courses that were most relevant to her learning to teach were the psychology and methods courses, which also supports her belief. Claire also affirmed that once you have taken these courses (and master the content), then it is easier to adjust your teaching. However, during the same interview, when asked about the role of her practicum on her learning how to teach process, Claire mentioned having learned more while on practicum than in her university classes. Placing more importance on her practicum experiences was probably due to her inability to make links with the theory advocated in her university classes. Thus, we can conclude that teacher education courses are still abstract for some pre-service teachers and the guidelines that they are provided are not enough to face the reality they experience while on practicum (Dillon & O'Connor, 2011). Concerning how Claire's prior belief about how teachers learn to teach and assess evolved throughout her final year of teacher education, we found that it did evolve mainly through Claire's own reflections. Despite not being given many opportunities to try and reflect on her own assessment practices, Claire was able to reflect on her teaching and assessment practices (including formative ones), as she stated in her second semi-structured interview. Thus, being obliged to follow her associate teacher's assessment approach, which were incompatible with her own beliefs and practices, and lacking of opportunities to try different ones while on practicum might have prevented this belief from evolving to an even greater extent. As we previously claimed, pre-service teachers' beliefs are

likely to change/evolve through teaching experiences and reflections (Barahona, 2014; Basturkmen, 2012).

Lastly, Marc-Antoine believes that someone becomes a teacher by learning in on-campus courses and mainly during practicum experiences. Similar to what we saw with Isabelle, Marc-Antoine also believes he learned the most "in the field with real teachers that have been doing this [teaching] for so many years." In terms of which elements influenced his practices, Marc-Antoine answered his practica and methods courses in which he learned "how to integrate technology and do certain types of activities." However, as previously seen, while on practicum, Marc-Antoine was not always able to directly integrate new knowledge acquired during his university classes in his practices, probably due to lack of support by his associate teacher to reflect on his practices and make such connections. As a consequence, Marc-Antoine's prior stated belief about how teachers learn is also related to a professional approach (Altet, 2008). Marc-Antoine's example highlights the importance of not only studying pre-service teachers' stated beliefs but also their actions since Marc-Antoine's stated beliefs did not match his actions while on practice (Pajares, 1992). In other words, by not being aware of the impacts of their beliefs on their practices, pre-service teachers could find themselves relying on practices that do not match their beliefs which could lead to severe consequences such as low self-esteem or a burnout (Sikka et al., 2007). Thus, we can classify Marc-Antoine's prior beliefs about how teachers learn as implicit and stable (Fives & Buehl, 2012; Wilcox-Herzog et al., 2014). As previously mentioned, implicit beliefs cannot be influenced through individual reflective practice (Nespor, 1987). Therefore, we believe that when preparing teachers to assess their pupils' learning, teacher educators, associate teachers and university supervisors should not only give precise examples of how to use different types of assessment in the classroom, but also help pre-service teachers reflect on and challenge their prior beliefs and practices.

Once again, the findings mentioned in this sub-section also have important implications for teacher education programmes as they indicate that pre-service teachers' beliefs about learning to teach and assess do have a direct impact on their professional development. In addition, our findings suggest that providing pre-service teachers with opportunities to teach and assess and reflect on their teaching practicum is not enough for some of their beliefs to evolve and change.

Our findings indicate that some pre-service teachers require more support in terms of how to identify and challenge some of their beliefs especially while they are on practicum.

2.1.3 Expectations for their final practicum

The third and final category of prior beliefs identified was pre-service teachers' expectations in terms of learning to teach and assess for their last practicum. As previously mentioned, pre-service teachers tend to have high expectations in terms of their practicum experiences as it is the place where they expect to learn to teach the most (Britzman, 2003; Bullock, 2011; Johnson, 2009; Korthagen, 2001; Russell, 1988). Briztman (2003) states that they often

> want and expect to receive practical things, automatic and generic methods for immediate classroom application. They search for recipes and often, a dominant concern with methods of classroom discipline because they are quite familiar with the teacher's role as social controller. (p. 63)

According to Choy, Wong, Goh and Ling Low (2014) these expectations brought to the practicum are "partly formed by their prior experiences and observations of teachers, and partly cultivated by their on-campus preparation and certain assumptions about the environment where the practicum takes place" (p. 473). Furthermore, these authors also state that these factors play a major role in pre-service teachers' sense of self-efficacy during the practicum. Eby et al. (2000) and Rajuan Beijaard and Verloop (2007) state that conflicting or dissimilar expectations, beliefs and values between pre-service teachers and their associate teachers concerning each person's role during the practicum could lead to negative learning experiences. Furthermore, another problem of having unrealistic or mismatched expectations is that pre-service ESL teachers will have the feeling of not having learned enough, which could affect their confidence to teach and assess. Thus, according to Zanting, Verloop and Vermunt (2001), pre-service teachers' needs should match their associate teachers' role as friction could compromise the learning process. For instance, if an associate teacher believes pre-service teachers are on practicum only to apply the knowledge they have learned during their on-campus classes or that pre-service teachers are already supposed to know how to teach and assess, pre-service teachers who are not autonomous

or struggle to reflect on their own might fail to challenge their prior beliefs and practices. In this subsection, we will first present whether the expectations that our participants had for their final year (courses and practicum) were met. Following, we will discuss the possible impacts these expectations had on how four of our participants' beliefs and practices related to formative assessment evolved throughout their fourth year.

According to our results, the majority of our participants were expecting more opportunities and support from their associate teachers to assess their pupils during their fourth year. For example, Annabelle claimed in our first semi-structured interview that for her fourth and final practicum, she was expecting more feedback from her associate teacher than she had received in her previous practica on her practices. In addition, she also stated that she desired to evaluate writing competencies as she felt that her previous associate teachers did not want her to evaluate her pupils' written assignments. However, when questioned in her second semi-structured interview about how her associate teacher influenced her practice, Annabelle answered not that much, as he was rarely in the classroom. Being on her own much of the time meant that she needed to rely on her own reflections in order to examine her practice. Although she discussed her learning with her associate teacher, he usually just listened to her and then agreed with whatever she had to say. In terms of the influence of her associate teacher on her assessment practices during the practicum, Annabelle also stated that her associate teacher did not tell her how to grade any assignments and that she was able to evaluate her pupils' written assignments twice. Moreover, the fact that her associate teacher was not in class very much and did not interfere much in her teaching practice made Annabelle feel like "the real teacher." Thus, we can state that only one of Annabelle's initial expectations was met (practicing assessments).

Despite having only one of her expectations met, Annabelle's beliefs and practices related to formative assessment still evolved. As previously seen in this chapter, Annabelle acquired knowledge by being given freedom to assess (which was one of her expectations), and by trying and reflecting on her newly acquired assessment knowledge by herself, which are the characteristics of Altet's (2008) professional approach and a biological paradigm. Not receiving feedback from her associate teacher (her second expectation) did not have a major impact on her beliefs and practices mainly due to her ability to reflect on her own. As stated by Basturkmen

(2012), “beliefs drive actions but experiences and reflection on actions can lead to changes in or additions to beliefs themselves” (p. 283). However, had she not been able to effectively reflect on her practices on her own, Annabelle’s associate teacher’s lack of support to reflect on her teaching and assessment practices there could have been negative effects on her professional development.

For his fourth and final year of teacher education, Carlos stated that he was expecting support from his associate teacher when dealing with parents and report cards and to acquire greater knowledge about assessment. In his second semi-structured interview, when asked if his initial expectations were met, Carlos answered negatively stating that

> what I was expecting never happened. I was expecting to see a lot more evaluation, a lot more... you know, hands on training which never happened. It [the fourth year] was a lot more hands and less theoretical. A lot more of hands on, and I don’t think that it ever came true. (…) I was expecting, how you create an appropriate rubric (…) or even millions of other things related to teaching.

In addition, as previously seen in this chapter, Carlos also claimed not learning anything new related to assessment during his practicum. As a consequence, Carlos graduated feeling that his fourth year was a waste of time. Carlos’s expectations were probably unrealistic based on the role played and support given by his associate teacher during his practicum. Carlos’s situation also illustrates the importance of having pre-service teachers discuss with their associate teachers and practicum supervisors the roles each one of them will take during the practicum. Despite being required to write a practicum contract in which they state their expectations, pre-service teachers tend not to take time to go over/discuss this document with their associate teachers (who usually end up not reading it). Since there was a discrepancy between Carlos’s expectations and his associate teacher’s, Carlos’s beliefs and practices related to assessment were also affected negatively in that they did not evolve very much. Thus, Carlos claimed not learning anything related to assessment (or teaching) during his fourth year of teacher education. On the contrary, since his prior-beliefs and practices were not challenged, they were rather reinforced and consolidated.

Claire's expectations for her final practicum at the beginning of her fourth year were to be treated like a real teacher and to evaluate her students' assignments fairly. As she stated in her first semi-structured interview, she expected her associate teacher to be someone who would see her as a colleague, someone who trusted her opinions and ideas and she expected that they could work together. In terms of her assessment practices, she mentioned during her second semi-structured interview that during her final practicum, she also wanted to learn how to evaluate her students' assignments fairly, which was one of her main challenges. Based on our analysis, we saw that Claire's expectations were met as they were in accordance with the role played by her associate teacher. As Claire stated in her second semi-structured interview, her associate teacher treated her like a colleague and provided her with many opportunities to evaluate her students' competencies throughout her practicum. Moreover, Claire's expectations also matched how she claimed to have acquired knowledge throughout her fourth year. As previously mentioned, despite not being given opportunities to try her own assessment practices and not sharing the same beliefs with her associate teacher, Claire was still able to acquire new assessment knowledge mainly by reflecting on her own or with her classmates through her reflexive journals. According to Claire, reflection was

> the way for me to share and to see if others had ideas on what didn't go that well. Also for me to see, to put all my ideas in one place, and whenever I wondered what I did in school, I would go back to see what I wrote [in the journals] and to see if now I could have an idea or to see if I remember what I did at school back, and to see like "oh, I tried that, and that still happened, and I will try that...I will try the same approach with another idea".. and I could write, not if it was good or wrong but it was a way to keep all my ideas and information in one place. Something that I could always go back to if something and if it was perfect way to share of something from the class and show or ways of teaching as well, and we could learn somethings from others as well...

Thus, only having his or her expectations met does not guarantee the development of pre-service teachers' beliefs and practices. We believe that pre-service teachers' expectations influence their professional developing by determining how they will behave (acquire knowledge) either on practicum or during their on-campus courses. In case of a mismatch or unrealistic expectations,

such as by not having opportunities to try their own assessments and support to reflect on their beliefs and practices related to assessment, pre-service teachers could be prevented from professionally developing their teaching skills. Therefore, we believe that the fact that Claire's expectations of having opportunities to assess were met and that she was able to reflect on her own contributed to the evolution of her beliefs and practices related to formative assessment.

Finally, Marc-Antoine expected his associate teacher to guide him when performing tasks that he was not comfortable with. He also expected his associate teacher to share his experience and techniques. In terms of his assessment knowledge, Marc-Antoine also added in his second semi-structured interview that he started his practicum expecting to learn more about assessment as he felt he had not received enough information about how to assess pupils. Also during the interview, we learned that Marc-Antoine's expectations were met as his associate teacher provided guidance by sharing his experiences on how to create grids for specific tasks. He also learned more about assessment by having the chance to evaluate students a few times during his practicum. However, with regards to how he acquired knowledge during his fourth year, we previously saw that although Marc-Antoine acknowledged the content taught in his on-campus courses important, he was not able to make links and apply this new knowledge in his practices. We believe that was mainly due to the lack of opportunities and support to reflect on his beliefs either with his associate teacher or on his own. As previously stated, pre-service teachers' beliefs are only likely to change/evolve if pre-service teachers are provided with teaching experiences and opportunities to reflect (Basturkmen, 2012). Therefore, despite having a positive experience during his practicum as his expectations were met, Marc-Antoine's experiences did not fully contribute to the evolution of his beliefs and practices related to formative assessment.

Based on our experience as researchers and teacher educators, we believe that pre-service teachers' struggle to adequately reflect on their teaching practice mainly due to two elements: the lack of understanding the goals and benefits of adopting a reflexive practice; and the lack of support and guidance on how to effectively reflect on their teaching beliefs and practices especially while they are on practicum. While on practicum, many pre-service teachers complain about having to write reflexive journals because they find them time-consuming and just another mandatory requirement to succeed in the course. Many pre-service teachers are also confronted

with the same issue with their associate teachers who still believe their role is to simply provide pre-service teachers with teaching tips and hints of how to teach or how to improve the activities that did not go so well instead of actually helping pre-service teachers reflect on their practices and beliefs. As a consequence, without being able to truly reflect on their practices and beliefs and reinvest on new knowledge acquired on their university courses, many pre-service teachers will tend to simply reproduce their associate teachers' practice and write reflections that only describe the activities that happened during their day. This practice is similar to what Ward and McCotter (2004) classified as the "routine" type of reflection in which pre-service teachers do not to focus on problems or make changes in their practices besides blaming problems on others or on the lack of time or resources. Therefore, in order to make sure pre-service teachers are able to adequate reflect, as previously mentioned, teacher educators should provide associate teachers and university supervisors with more support so that they are clear about how and why pre-service teachers should reflect on their learning to teach process and are better able to support this process in meaningful ways.

In the next section, we will present two important elements that influenced how our participants' beliefs and practices related to formative assessment evolved: their associate teachers and their supervisors' role and support in terms of their professional development.

2.2 Associate Teachers' Role and Support

While on practicum, pre-service teachers are expected to be able to test, reflect on and apply theories and methods they have learned during their courses. Therefore, in this section, we will discuss the possible impacts of three of our participants' associate teacher's influence on the evolution of their beliefs and practices related to formative assessment.

Claire and Marc-Antoine seem to have been positively influenced by their associate teachers. For Claire, her associate teacher was a positive influence on her assessment knowledge as the teacher would give Claire feedback on the many evaluations and grids that Claire was able to build. Despite feeling a bit exhausted at the end of her practicum, as she had to create all of her teaching material, she was feeling more prepared to teach than some of her classmates who had an

easier practicum. Morever, while on practicum, Claire had to follow her associate teacher's assessment approach, which was mainly summative assessments and that did not match her assessment beliefs. However, despite this mismatch, Claire's associate teacher's role and support positively influenced her beliefs and practices related to formative assessments, mainly due to the opportunities that Claire was given to create and test some of her own assessment tools while on practicum. As mentioned in chapter one, mismatches between the pre-service teachers' beliefs and their assessment practices could lead to severe consequences such as a low self-esteem and a burnout (Sikka et al., 2007). In other words, by being obliged to follow an assessment practice that she does not believe in, there could have been negative consequences on Claire's professional development. Fortunately, Claire's beliefs were flexible and context-independent (Fives & Buehl, 2012; Hermans et al., 2008), as they remained unchanged after the end of her practicum since she adopted assessment practices that matched her beliefs in her own teaching contract that started after her practicum.

According to Marc-Antoine, his associate teacher's support also positively influenced his assessment practices as he helped Marc-Antoine build grids and gave feedback when Marc-Antoine was creating tests. Marc-Antoine's associate teacher's role and support also matched Marc-Antoine's fourth and final practicum expectations to be guided when performing tasks that he was not comfortable with (such as assessments) and to learn about techniques for assessment that he had not seen in his university classes through observing his associate teacher's practices. In terms of his associate teacher's role and support, some associate teachers believe that their role is only to focus on transmitting techniques and tips associated with what they believe to be effective practices (Zeichner, 2005). We believe that this was Marc-Antoine's case. During our second semi-structured interview, Marc-Antoine claimed not having had many opportunities to test his own grids or to create important assessments. The main problem with this approach is that pre-service teachers are prevented from testing his own activities (and assessments) learned at the university while on practicum. As a consequence, pre-service teachers are not able to reflect on their beliefs and practices as they are only required to reproduce/mirror their associate teachers' ones. Furthermore, pre-service teachers will have to wait until they have their own classes (once they graduate) to test what they learned during their on-campus classes. Therefore, Marc-Antoine's

associate teacher's role and support partially affected the evolution of Marc-Antoine's beliefs and practices related to formative assessment.

However, for Annabelle and Carlos, their associate teachers' role and support in their professional development did not seem to have a major impact on their beliefs and practices related to formative assessment. According to Annabelle, her associate teacher did not impose any of his own practices on her and he would let her choose her own teaching methods and approaches and would provide support only when requested. As a consequence, Annabelle chose to test some of her associate teacher's practices (e.g. peer evaluation and correction) and she mainly reflected on her practices by herself. As a consequence, the lack of support given by her associate teacher did not seem to have had an impact on the evolution of her beliefs and practices related to assessment throughout her fourth year.

Despite also being free to teach on his own, Carlos's practicum outcome was not the same as Annabelle's. As presented in our previous chapter, Carlos claimed to have received very little support from his associate teacher and as a consequence, he was not influenced by his teacher's perspectives on assessment. Based on Carlos's statements, his associate teacher did not have the same vision of her respective roles as she chose not to interfere and let Carlos teach on his own. Therefore, he chose to follow his own approach to teaching, which was based on his prior beliefs and practices, meaning that he felt he did not learn anything new while on the practicum. This has been identified in the literature as a situation where a student teacher reaches a certain level of teaching competency, enough to feel reasonably successful, but in fact has hit a plateau because they are unable to envisage any changes that could lead to improvement (Dillon, 2016). This situation is usually a result of a combined lack of communication and support from the associate teacher and an inability to reflect on one's practice on the part of the student teacher. In terms of his assessment practices, Carlos felt that his associate teacher also seemed to lack knowledge of what to do with the students' assessments, which did not help him improve his own practices. Finally, Carlos also acknowledged that his daily reflections (reflecting on his own) did not help him improve his teaching skills as he believed the only way to reflect effectively is either in teams or in a group or by discussing with other people. Therefore, due to a mismatch between Carlos and his associate teacher's beliefs and practices related to formative assessment, and the lack of

appropriate support that he was given, Carlos relied on his previous experiences of teaching and learning languages and the knowledge taught in his fourth year ended up being ignored. In other words, Carlos's prior beliefs and knowledge acquired while teaching adults (before he started university) prevailed over the knowledge taught in his courses.

These findings also have important impacts on teacher education programmes. Many associate teachers believe that the best approach in terms of their supervision is to leave their pre-service teachers alone believing that they will be able to reflect and improve their teaching on their own. However, that is not a recommended approach as it might not fit every pre-service teacher's profile. Two possible reasons for the above-mentioned inadequate support might have been the lack of information about her role and instructions on how to mentor new teachers given by the university and a misconception that her role as an associate teacher was only to focus on transmitting techniques and tips associated. Associate teachers must try to identify what kind of support the student teacher requires and to communicate with their student teacher to learn more about their expectations for the practicum and their beliefs about learning to teach from the beginning of the practicum. As recommended by many authors, through small group discussions or meetings, associate teachers should help pre-service teachers challenge and reflect on the impact of their beliefs on their practices (Borg, 2003; Hollingsworth, 1989; Nias et al., 1992). Although pre-service teachers at our university already have opportunities for small group discussions during their practica (CARDEC[28] meetings), we believe that associate teachers could also provide similar opportunities during their feedback sessions at the end of the day or after a teaching period. However, in order for this practice to be effective, firstly, associate teachers must be made aware of the content being taught at the university. Secondly, they should receive more instructions and support from teacher educators and university supervisors in terms of how to help pre-service teachers reflect on their teaching beliefs and practices. Finally, associate teachers could also encourage our pre-service teachers to work more collaboratively with other pre-service teachers to develop each other's reflection skills, which would foster learning communities (Le Cornu & Ewing, 2008). We are aware that associate teachers and pre-service teachers have extremely busy schedules and many other commitments, and it is difficult for them to understand the importance of taking the time to discuss what happened in class and to guide and support the reflection process.

[28] Reflective monitoring seminar for the development of competencies

However, it is extremely important that all of the partners understand that these feedback and discussion sessions are an essential part of the practicum.

2.3 Supervisor's Role and Support

While on practicum, pre-service teachers also receive the support of their university practicum supervisors who help them with many tasks: reflecting on and coming up with solutions to their problems; identifying how their beliefs influence their practices; and becoming aware of how their associate teachers' beliefs and practices are influencing their own. However, without adequate support, university supervisors could also compromise pre-service teachers' professional development by inhibiting them from making connections between the theory learned in their teacher education programmes and their practices (Graham, 1997, 2005; Koerner et al., 2002; LaBoskey & Richert, 2002; Zeichner, 2002). Thus, in this section, we will discuss the possible impacts of our participants' practicum university supervisors on the evolution of their beliefs and practices related to formative assessment. To do so, we compared our participants' beliefs and expectations concerning their university practicum supervisors in terms of their role and support with what actually happened throughout their fourth year regarding their formative assessment knowledge acquisition. Once again, to avoid redundancy, we will focus only on the findings of four participants (Annabelle, Carlos, Claire and Marc-Antoine). It is important to mention that the author of this study was also the supervisor of two of them (Claire and Marc-Antoine).

Based on the findings, the university supervisors do seem to have an impact on how pre-service teachers' beliefs and practices related to formative assessment evolve. For instance, at the beginning of her fourth year, Claire believed that supervisors had the role of guides towards helping pre-service teachers become better teachers. When asked during her second semi-structured interview how her supervisor had influenced her assessment practices, she stated that since he was doing a research project on assessment, she felt comfortable with talking to him as assessments were "sort of his expertise." Claire also mentioned that she appreciated having his feedback on her teaching (during his visits) beside her associate teacher's and spending some time discussing assessment during their CARDECs. The role of the university supervisor is to provide student teachers with opportunities to discuss and reflect on their beliefs about teaching, including

assessment, during the practicum. When that happens, it can make a contribution to the evolution of pre-service teachers' beliefs and practices related to formative assessment.

Marc-Antoine also claimed that his assessment practices were positively influenced by his supervisor who would provide helpful feedback since his supervisor was doing a study on this topic. In addition, Marc-Antoine stated that despite not liking the CARDECs in general, he enjoyed the moments during which his university supervisor made him reflect on certain things such as questions that he could ask his students or things that he did not do and should have done. Moreover, Marc-Antoine also claimed to have learned more about formative assessments during his practicum with his university supervisor, as he previously thought they were just "tests that did not count." He now knows that formative assessment is much broader and includes things like the questions he might ask at the end of an explanation. Thus, based on Marc-Antoine's statements, we can infer that his university supervisor did positively influence how his beliefs and practices related to formative assessment evolved by providing opportunities to challenge and reflect on the effects of his beliefs on his practices and professional development.

However, that was not the case for Annabelle and Carlos. Annabelle, for instance, stated that her fourth-year university supervisor only provided her with feedback regarding her teaching during her intensive practicum, as before it started, she did not get a lot of comments, explanations or instructions. In terms of her assessment practices, Annabelle affirmed not receiving any feedback as her practicum supervisor did not visit her when she was doing any assessments. Similarly, when asked at the end of his fourth year whether his practicum supervisor helped him improve his assessment practices, Carlos also answered negatively. According to Carlos, his supervisor provided him with general feedback and motivational insights and that he did not mention much about evaluation.

Therefore, based on Annabelle and Carlos's statements, it seems that their practicum supervisor did not have a major impact on their beliefs and practices related to formative assessment throughout their fourth year. One of the possible justifications for this event is the lack of support given by the university to their supervisor by not making him aware of the courses they had taken and the actual knowledge taught in those classes. As Zeichner (2010) states, university

supervisors often do not participate in decisions about the teacher education programmes. As a consequence, by not being aware of such contents, practicum supervisors could struggle to determine whether their student teachers applied what they had learned (Kissau & Algozzine, 2013) and might not be able to help pre-service teachers bridge the gap between theory and practice. However, similar to what could happen to associate teachers, this event might have also happened due to their practicum supervisor's own beliefs concerning his role with regards to the student during the practicum. Further research is required to determine the possible reasons concerning supervisors' lack of support towards pre-service teachers' assessment practices. Our findings corroborate Borko and Mayfield's (1995) study in which the majority of their university supervisors had limited roles (influence) on pre-service teachers' process of learning to teach. Therefore, practicum supervisors must work in collaboration with associate teachers and have an active role in helping pre-service teachers identify and challenge their own beliefs, such as during their feedback sessions during the practicum.

These findings corroborate other studies in which university supervisors still tend to have a limited/discrete role (Allen & Wright, 2014) or struggled to work in collaboration with some associate teachers (Thomas, 2017). In a recent study, Russell (2017) focused on his own role as a university practicum supervisor in terms of helping pre-service teachers navigate between theory seen during education classes and practice (practicum experiences). Among his findings, Russell (2017) highlights the impacts practicum supervisors' prior experiences have on his or her supervision. The author claims that,

> if the university supervisor has a teaching background that focused on telling and the transmission of theory-based knowledge, then the default supervisory behaviour may follow the familiar pattern of tips and tricks rather than understanding the learning experiences of the beginning teacher. (Russell, 2017, p. 204)

In other words, university supervisors' beliefs and prior experiences also shape pre-service teachers' professional development. Thus, university practicum supervisors should also be aware of their own beliefs, for instance, conceptions of teaching and learning and formative assessment, as they will guide how they will supervise their pre-service teachers. In conclusion, university

supervisors have an important role in terms of how pre-service teachers' beliefs and practices evolve. However, university supervisors must receive adequate support from the university (such as by working in collaboration with different teacher educators) in order to help pre-service teachers make connections between the theory learned in their teacher education programmes and their classroom contexts. In addition, they must help pre-service teachers identify their own beliefs and expectations in order to provide adequate support towards their professional development so that pre-service teachers are aware of how to overcome possible struggles they might encounter as newly graduated teachers.

2.4 Pre-service Teachers' Fourth-year Teaching Methods Course

In teacher education programmes, pre-service ESL teachers also learn to assess their future pupils in their teaching methods courses by making connections between planning, teaching and assessing pupils. In addition, these courses are also known to promote changes in pre-service teachers' beliefs and practices (Agee, 1997; Clift & Brady, 2005; Graham, 1997; 2005; Wolf et al., 1999). Therefore, we will discuss in this section the impact(s) of their final teaching methods course on the evolution of our participants' beliefs and practices.

Based on our findings, BEALS final teaching methods course had a major impact on four out of six participants. For instance, Annabelle not only learned to differentiate her assessments to meet her students' needs in her last teaching methods course but was also able to apply this new knowledge to her practices. Claire also claimed to have learned how to build appropriate assessment grids in her last teaching methods course. In addition, she also stated that she was able to put this knowledge into practice whenever she was evaluating her students and using her own grid. In addition, despite not being one of the elements that she affirmed having learned in her teaching methods course, Claire also learned during her practicum and her university classes how to formatively assess her students such as by starting her classes with a brainstorm activity (helping her students review the content seen in her previous class).

Based on Annabelle and Claire's statements, applying the knowledge advocated in their teaching methods course was possible due to the fact that it made sense to them (Vanhule, 2009b)

and it was cognitively compatible with their prior beliefs (Calderhead, 1996; Freeman & Johnson, 1998; Holt-Reynolds, 1992; Wideen et al., 1998). Furthermore, applying this new knowledge was also only possible due to the opportunities both were given by their associate teachers, while on practicum, to test and apply their evaluations. As stated by Vanhulle (2009a), in order to be meaningful and effective, teacher education programmes should not only provide pre-service teachers with knowledge that makes sense to them but also with opportunities for them to acquire and transform knowledge collectively and individually. In addition, we believe that their new knowledge acquisition was also influenced by their professional development model adopted in their final practicum. Annabelle and Claire adopted a professional approach (Altet, 2008) as they would take a step back, analyze and reflect on how the new knowledge learned in their teaching methods course could be used in their classrooms. Therefore, Annabelle and Claire's final teaching methods course had a positive impact on the evolution of their beliefs and practices related to formative assessment as they were also confirmed and solidified.

However, this was not the case for Carlos and Marc-Antoine. According to Carlos, his last teaching methods course did not influence his assessment practices as he mainly relied on his previous teaching and assessment practices during his practicum. Despite claiming to have learned something new about assessment (differentiation) in his last teaching methods course, Marc-Antoine was not able to put this new knowledge into practice as all of his groups were strong and he did not have students with learning disabilities. Therefore, Marc-Antoine's last teaching methods course did not have a direct impact on his assessment practices.

According to our analysis, we believe that Carlos and Marc-Antoine were unable to put their new knowledge from their last teaching methods course into practice either because it did not make sense to them at the time the course was taught (Vanhulle, 2009b) or the opportunities they were given were not enough to help them reflect on how this new knowledge could be applied/transform it into practice (Altet, 2008). Another possible reason could be the fact that teaching methods courses tend to follow Altet's (2008) professional approach to professional development requiring pre-service teachers to take a step back and reflect on how new knowledge could be applied in their classrooms. Moreover, as Basturkmen (2012) states, although pre-service teachers' beliefs guide their actions, only experiences and reflection on these actions could lead to

changes in or additions to their beliefs. In Carlos's case, this support should have included more guided reflections, since he claimed to struggle to reflect on his own. Since assessment was not the main focus of the teaching methods course and there was not a lot of time spent on developing different approaches to assessment in the course, Carlos and Marc-Antoine were not able to make direct links to their assessment practice. Therefore, Carlos and Marc-Antoine's last teaching methods course did not have a major impact on the evolution of their beliefs and practices related to formative assessment.

Based on our findings, we can conclude that teaching methods courses do have a positive impact on how pre-service teachers learn to teach and assess as they provided the majority of our participants with new ways of thinking about teaching and learning, and they promoted changes to their perception of practices (Grossman, Valencia & Hamel, 1997) and their beliefs and practices (Agee, 1997; Clift & Brady, 2005; Graham, 1997; 2005; Wolf et al, 1999). However, these advantages can only become real if pre-service teachers are provided opportunities to test their own methods and approaches and to reflect on them with the adequate support by both their associate teachers and university supervisors. In addition, pre-service teachers must also become familiar with their prior beliefs, otherwise they are likely to rely on their previous experiences of teaching and learning languages and the new knowledge taught in their teaching methods course could end up being ignored (Henrichsen, 2010; Tillema, 1998; Vanderwoude, 2012) or washed out by field experiences (Zeichner & Tabachnick, 1981).

In order to avoid such phenomenon, researchers have tried different options throughout the last decades. Among these options, we can cite Campbell (2012) study that investigated the effects of a field-based methods courses and found that the participants developed a deeper understanding of the promoted practices and were more successful in enacting the practices in diverse urban secondary schools. However, as Zeichner (2010) also states, having a school-based methods course does not guarantee that it will be any different than a campus-based version. In addition, Zeichner (2010) proposes the creation of hybrid spaces (third spaces) in pre-service teacher education programmes that would connect school and university-based teacher educators and practitioners by involving "an equal and more dialectical relationship between academic and practitioner knowledge in support of student teacher learning" (p. 92). Based on our findings, in

order to bridge the gap between theory and practice, teacher education programmes should invest in promoting learning communities (Le Cornu & Ewing, 2008) and communities of practice (Wenger et al. 2005) in which pre-service teachers work in collaboration with each other, with associate teachers and teacher educators to professionally develop their teaching skills. By promoting these practices, teacher education programmes would not only be making sure that associate teachers are more involved in with what and how pre-service teachers learn at the university but also making sure that the programmes are providing pre-service teachers with meaningful knowledge, based on the reality teachers live at their schools.

2.5 Reflections

The final important element that affected how our participants' beliefs and practices evolved was their reflections on their learning and practices. As stated by Basturkmen (2012), pre-service teachers' experiences and reflection on their actions could generate changes in or additions to their own beliefs. In addition, through reflection, pre-service teachers are able to analyze, discuss, evaluate and change their own practices (Calderhead & Gates, 1993). Therefore, we will discuss in this section how four of our participants' reflection practices had an impact on their beliefs and practices related to assessment practices.

According to our findings, reflections had a direct impact on how Annabelle and Claire's beliefs and practices related to formative assessment evolved. For instance, most of the time during her practicum, Annabelle had to reflect by herself as her associate teacher was just listening to her and agreeing with what she was saying. As Annabelle stated in our second semi-structured interview, she mainly progressed as a teacher by reflecting about what she creates, when students are asking questions, and on what is happening at the very moment during her classes. Reflections also had an important impact on Claire's practices as they were a way for her to share and look for ideas with her classmates to help her improve what did not go well in her classes. In terms of her assessment practices, during our second semi-structured interview, we noticed that reflections led Claire to see the importance of varying her assessment practices to have a better picture of her students' learning. Claire's associate teacher and supervisor's role and support also influenced her reflections. Despite not allowing her to develop her own assessment practices, Claire's associate

teacher provided support by giving feedback on her assessments and grids (which probably made Claire reflect). In terms of Claire's supervisor, Claire mentioned that she enjoyed talking about assessment during her CARDECs. As mentioned in our first chapter, during the CARDEC meetings, besides being a moment in which pre-service teachers are able to share their beliefs, concerns and uncertainties about their practicum and teaching with their classmates and their practicum supervisor, practicum supervisors help them reflect on their own beliefs and practices. Therefore, through reflections and the opportunities Annabelle and Claire were given to assessments pupils' learning, Annabelle and Claire's beliefs and practices related to formative assessments also evolved by being both confirmed (beliefs) and further developed and improved (practices).

However, Carlos and Marc-Antoine did not have the same outcomes with their reflections. According to Carlos, his daily reflections did not help him improve his teaching because when writing reflections because he just writes what he already knows, and he does not really reflect on what he needs to improve. As a consequence, Carlos's reflections did not have any impact on his beliefs and practices related to formative assessment and as a consequence, they did not evolve, as they were not challenged. One possible factor that influenced Carlos's reflection was his prior beliefs related to his associate teacher's role and support. As previously seen, while on practicum, Carlos's associate teacher would let him work on his own and did not offer much support in terms of helping him reflect on his practices. In addition, we also saw in this chapter that Carlos believed that reflecting in groups was the best way to improve one's practice since "most people are not big enough to accept that they are doing something wrong if they are." In other words, Carlos believed that pre-service teachers struggle to reflect and that reflecting meant acknowledging one's own weaknesses. In addition, we can infer that Carlos was expecting to have his associate teacher help him reflect on his practices. As a consequence, without having the appropriate support from his associate teacher to help him reflect on his practices and help him unlearn some of these practices so that he could learn new ones (Cochran-Smith, 2003), Carlos chose to follow his own way of teaching, based on his prior beliefs and practices and the new knowledge taught in his teaching methods course ended up being ignored. This phenomenon could have been avoided if Carlos's associate teacher had been aware of his expectations and prior beliefs and had established goals at the beginning of his practicum.

Despite acknowledging that reflections have an important role in his practices, Marc-Antoine also seems to have struggled with reflection while on practicum. In other words, Marc-Antoine's reflections were not enough to help him apply the knowledge learned in his last teaching methods course in his practices. For instance, since his understanding of the concept of differentiation taught in his last teaching methods course was that it is only to be used with students with learning disabilities and not with regular students, as he mentioned in his second semi-structured interview, Marc-Antoine was not able to put this into his practice. Therefore, Marc-Antoine's reflections had some impact on his beliefs but not much on his practices related to formative assessment.

According to the literature, among some of the elements that contribute to pre-service teachers' effective reflexive practice are action research courses (such as the Professional Essay in our programme), practicum journals and competency reports. For instance, in Hagevik et al.'s (2012) study, the authors claimed to observe a shift to more developed reflection levels when pre-service teachers are involved in a teacher research process. According to Zellermayer and Tabak (2006), through action research, pre-service teachers learn to see the role of teachers as "a theorizer, an activist and a school leader, as well as a member of a larger professional community, such as that attending the affiliates' assembly, which talks about big ideas rather than local techniques" (p. 46). As previously mentioned, promoting pre-service teachers' learning through collaboration within a community is one of the goals advocated by learning communities (Le Cornu & Ewing, 2008) and communities of practice (Wenger et al., 2005). Therefore, by guiding pre-service teachers in their action research process, teacher educators would also be helping pre-service teachers to their professional development. However, it is important to mention that simply providing pre-service teachers with action research does not guarantee that they will see their role as described above. It is important to make sure that pre-service teachers are adequately guided and supported in their enquiry.

Based on our findings, we can conclude reflections also had a major impact on the evolution of the majority of our participants' beliefs and practices related to formative assessment. It is important to highlight that only providing pre-service teachers with opportunities to reflect on their own does not seem to make their beliefs and practices change. Other elements such as

freedom to try new assessments techniques and methods, adequate support by both associate teachers and practicum supervisors are necessary. As Nias et al., (1992) state, this support could take the form of meetings and/or small group activities that encourage discussion among the participants. In order for these discussions to be meaningful, associate teachers and university supervisors should be aware of what is being taught (theory) on the on-campus courses. Furthermore, associate teachers and university supervisors should receive adequate support such as through workshops at the beginning of the school year in terms of how to help pre-service teachers challenge their prior-beliefs and teaching experiences in order to unlearn (Cochran-Smith, 2003) and how to adequately reflect on their practices (Schön, 1983). Considering that associate teachers often lack time to attend university workshops, teacher educators could also prepare online ones that associate teachers would be able access from their homes at any time. Another possible tool would be the creation of online forums for associate teachers to share concerns and experiences.

In this chapter, we first answered our research question which was how fourth-year pre-service ESL teachers' beliefs and practices related to formative assessment evolved. Based on our findings, we saw that throughout their fourth year, the majority of our participants' beliefs and practices evolved by being reinforced, consolidated or (co)constructed. This was only possible due to the opportunities that our participants were given to assess their pupils while on practicum and by the support to reflect on their assessment practice either by their associate teachers, university supervisors or by themselves. In addition, we also saw that our participants' approach and paradigm to practicum directly contributed to the evolution of their beliefs and assessment practices. The participants whose beliefs and assessment practices evolved adopted a biological approach to practicum which allowed them to acquire new assessment knowledge through their teaching methods and professional essay courses and apply it on their practicum by taking a step back and reflecting on how this new knowledge could be used in their classrooms. In the second part of the chapter, we discussed some of the elements that influenced the evolution of our participants' beliefs and practices related to formative assessment. For instance, we saw that two of our participants' beliefs and practices related to formative assessment did not evolve or only partially evolved most likely because of their prior beliefs, the lack of opportunities to assess their pupils while on practicum, lack of support by their associate teachers to reflect on their assessment

practices or unfulfilled expectations about what they should learn during their final year of teacher education. Finally, based on our findings, we concluded that in order to provide pre-service teachers with the most adequate preparation, teacher educators, associate teachers and university supervisors should work in collaboration to create learning communities (Wenger et al., 2005) and communities or practices (Le Cornu & Ewing, 2008). Moreover, they should not only take into consideration pre-service teachers' prior beliefs while teaching and providing their support, but also help pre-service teachers themselves identify and challenge any hidden beliefs especially while on practicum. Tables 8 and 9 summarize the findings presented in this chapter. In the next chapter, we will present our conclusion, the limitations of this study, further research and recommendations.

Participant	Evolution of beliefs and practices related to formative assessment
Annabelle	**Evolved**: new assessment practices were acquired during her fourth year and prior beliefs and practices were reinforced, validated or (co)constructed.
Carlos	**Did not evolve**: during his fourth year, only his prior beliefs and practices were reinforced/consolidated
Mélissa	**Evolved**: prior beliefs guided her actions and through reflections on her actions, she acquired new assessment practices and her beliefs were confirmed and solidified
Claire	**Evolved**: through reflections and opportunities to assess, and since new knowledge advocated in her final year of teacher education also made sense to her prior beliefs and practices
Isabelle	**Evolved**: through reflections and opportunities to assess, she was able to apply new assessment practices based on new knowledge acquired in her last teaching methods course; some of her prior beliefs and assessment practices were also consolidated and reinforced during her final practicum
Marc-Antoine	**Partially evolved**: he claimed learning new assessment knowledge in his fourth year, however, he was not able to apply (transfer) this new knowledge during his practicum

Table 10: *The evolution of pre-service teachers' beliefs and practices related to formative assessment*

Element	Impact
Prior beliefs	**Positive and negative:** Worked as a filter shaping and blocking new knowledge based on prior experiences (as students and as teachers)
Associate teachers	**Positive:** Guided and supported reflections and (new) teaching and assessment practices; Provided pre-service teachers with opportunities to try out new assessment techniques and methods
	Neutral: Indifferent (did not guide or support reflections)
	Negative: Pre-service teachers were required to follow associate teachers' assessment methods which prevented them from trying some of the new assessment knowledge acquired during their university courses
University Supervisor	**Positive:** Guided and supported reflections and new assessment practices; Helped pre-service teachers make links between theory and practice (CARDECs and feedback sessions)
	Neutral: Indifferent (did not focus on formative assessment);
Teaching Methods Course	**Positive:** Provided pre-service teachers with new classroom assessment practices based on new knowledge acquired in class
	Neutral: Some of the participants were not able to apply any of the new assessment knowledge acquired in their last teaching methods course during their final practicum
Reflections	**Positive:** Reflection on action helped some of the participants make links between the theory about assessment learned during their on-campus courses on their final practicum
	Neutral: Some of the participants were not able to reflect on their actions so as to improve their assessment practices

Table 11: *The main elements and impacts that influence the evolution of pre-service teachers' beliefs and practices related to formative assessment*

CONCLUSION

1. SUMMARY OF THE RESULTS

This study had the purpose of investigating how fourth year pre-service ESL teachers' beliefs and practices related to formative assessment evolved throughout their last year of teacher education. In addition, we had two main objectives: identify pre-service teachers' beliefs and practices related to formative assessment at the beginning of their fourth year; and identifying possible elements that influenced their professional development. Based on our findings, we saw that four of our six participants' beliefs and practices related to formative assessment evolved throughout their fourth year by being confirmed and consolidated. In addition, we saw that these beliefs and practices also evolved as these four participants were able to apply new assessment knowledge learned in their last teaching methods course or on their practicum (associate teachers' practices). We also believe that their beliefs and practices evolved because of opportunities they were given while on practicum to reflect on their own (Annabelle) or with the support of the associate teachers or university supervisor through their CARDECs (Mélissa, Claire and Isabelle). However, this was not the case for two of our participants (Carlos and Marc-Antoine) since their university supervisor and associate teachers' support was not enough for them to challenge and reflect on their beliefs and how they could implement new knowledge acquired in their on-campus courses.

In the second main section of our fifth chapter, we discussed five of the most relevant elements that seemed to have had a major impact on our participants: (a) prior beliefs; (b) their associate teacher's role and support; (c) their university supervisor's role and support; (d) the teaching methods course; and (e) reflections. It is important to mention here that, as we presented in chapters one and two, these elements had already been identified in the literature as having an important impact on pre-service teachers' professional development.

Based on our findings, we concluded that pre-service teachers' prior beliefs that we identified (conceptions of teaching, how teachers learn to teach, and their expectations of what to learn throughout their fourth year) also influenced our participants' professional development by

blocking programme experiences that are cognitively incompatible with these prior beliefs (Calderhead, 1996; Freeman & Johnson, 1998; Holt-Reynolds, 1992; Wideen et al., 1998). Therefore, we conclude that when it comes to how pre-service teachers learn to teach and assess, teacher educators, associate teachers and university supervisors might still not be taking into consideration pre-service teachers' prior beliefs and practices.

As stated in the first chapter, the support associate teachers provide can have either positive or negative impacts on pre-service ESL teachers' learning-to-teach process (Beck & Kosnik, 2000; Hollingsworth, 1989; Zeichner, 2005). In the case of our study, we saw a mix of both. For Claire and Marc-Antoine, their associate teachers had some positive impact on the evolution of their beliefs and practices related to formative assessment. Despite being obligated to follow their associate teachers' assessment practices, Claire and Marc-Antoine were still able to try some of their own assessments tools and receive feedback from their associate teacher. However, the same was not observed with Carlos. Based on our findings, in spite of giving Carlos freedom to assess how he desired, Carlos's associate teacher support was not for him to reflect or challenge his prior beliefs and practices related to assessment which might have prevented him from learning and trying the new assessment knowledge taught in his last teaching methods courses. Therefore, we conclude that associate teachers must not only provide pre-service teachers with opportunities to try their own assessments tools and techniques learned at the university but also guide and help pre-service teachers to reflect and challenge their prior beliefs and practices. Otherwise, pre-service teachers could end up relying only on their previous experiences and the new knowledge taught during their on-campus courses or while on practicum could end up being ignored (Henrichsen, 2010; Tillema, 1998; Vanderwoude, 2012).

University practicum supervisors' role and support also had an impact on how pre-service ESL teachers' beliefs and practices related to formative assessment evolved. Based on our findings, Mélissa, Claire, Isabelle and Marc-Antoine's university supervisor helped them reflect more on their assessment practices or by suggesting assessment tools. However, that was not the case for the remaining participants (Annabelle and Carlos) who mentioned that their university supervisor would mainly give feedback on their classes but not on their assessments. Therefore, we can conclude that university supervisors could influence the evolution of pre-service teachers'

beliefs and practices. In other to do so, the university should provide them with better support of how to bridge the gap between theories taught in their on-campus courses and practice while they are on practicum (Turunen & Tuovila, 2012). One possible way of bridging this gap would be during their meetings (CARDECs) in which university supervisors could guide pre-service teachers to identify the impacts of their prior beliefs and teaching experiences on their learning to teach process. In order to do so, university supervisors can apply questionnaires such as Horwitz's Beliefs about language learning inventory (BALLI) (Horwitz, 1985), which contains statements related to how students learn and how teachers teach. Another possibility would be to have pre-service teachers discuss in pairs (or small groups) classroom-based situations in which they would share their beliefs. Otherwise, university supervisors' support could only be limited to giving pre-service teachers teaching tips and grading their assignments.

The fourth element that we identified that had an important impact on how pre-service teachers' beliefs and practices related to formative assessment evolved was their last teaching methods course. According to our findings, five of our six participants (Annabelle, Mélissa, Claire, Isabelle and Marc-Antoine) claimed to have learned new assessment knowledge during their final teaching methods course. However, only four of them were able to apply this knowledge to their practice (Annabelle, Mélissa, Claire, Isabelle). As stated in our previous chapter, we believe that this was mainly due to the professional development approach they adopted throughout their fourth year. The four participants who claimed to have learned and been able to apply new assessment knowledge into their practices seemed to have adopted Altet's (2008) professional approach to professional development and biological paradigm to practicum. On the other hand, those who were not able to apply any new knowledge seemed to have adopted an instrumental approach and a technological paradigm to practicum (Altet, 2008). Therefore, we can conclude that only providing pre-service teachers with opportunities to reflect on their beliefs and practices such as the group discussions in their teaching methods courses is not enough to help them challenge their prior beliefs and practices. In order for beliefs and practices to evolve, we believe that pre-service teachers should also be given opportunities to reflect and challenge these beliefs while on practicum with the support of their associate teachers and university supervisors.

The fifth and final element that we presented that seemed to have influenced how our participants' beliefs and practices related to formative assessment evolved was their reflections. Although five out of our six participants acknowledge the importance reflections had on their learning to teach process, only four of them seem to have used reflections to infuse new assessment knowledge into their practices. Among the elements that also contributed to how reflections helped pre-service teachers' beliefs and practices related to formative assessment evolve, we found their associate teachers' support and opportunities to assess, university journals (daily journals) and CARDECs conducted by the university supervisors (university practicum meetings). However, reflections did not seem to have had a major impact on two of our participants as they were not able to apply new assessment knowledge acquired in their last teaching methods course to their practices. Despite also having had the same opportunities to assess and reflect on their beliefs, we believe that both of them were not supported and guided enough while on practicum by their associate teachers in terms of how to bridge the knowledge advocated in their teacher education programme with their practices. Therefore, we can conclude that reflections could have a major impact on how pre-service teachers' beliefs and practices evolve. However, reflections alone are not enough as pre-service teachers should also be free to try new assessment techniques and methods, and receive adequate support from both associate teachers and practicum supervisors. In addition, we agree with Walkington (2005) who believes that in order to bridge pre-service teachers' gap between theory and practice, associate teachers and practicum supervisors should "plan time for discussion to help them [pre-service teachers] making the implicit explicit to avoid potentially incorrect assumptions; and modeling reflective practice by challenging one's own thoughts openly can give 'permission' for the pre-service teachers to do likewise" (p. 61).

2. LIMITATIONS

One of this study's limitations was the number of participants. Initially, we intended to have a minimum of ten participants. However, since this was a volunteer-based study, only six fourth year pre-service teachers chose to be part of it. Another limitation was the fact that the author was also the university practicum supervisor of some of our participants. However, there was no bias because since we did not conduct the initial interviews with our students, and we did not work with the data until their final marks were in. In addition, the results we have obtained

concerning the role and support that the researcher provided to his participants who were also his student teachers only served to corroborate other studies in which university supervisors were also found responsible for helping pre-service teachers bridge the gap between theory and practice (Russell, 2017; Turunen & Tuovila, 2012). Morever, another limitation of this study was collecting data from participants that were the researcher's students (Professional Essay course and fourth practicum course). Although all of them were volunteers and free to withdraw from the research at any moment they wished, it is possible that some of them might have felt obligated to be part of this study. In terms of the validity of our findings, the researcher's role as a supervisor and as a teacher educator did not vary from the one that he has adopted for the last 7 years that he has worked at the Université de Sherbrooke. Moreover, as previously mentioned, in order to ensure validity and impartiality, he asked a colleague to collect and keep all the data with the students before their grades had been submitted.

Collecting data through narratives also had its limitations in our study. Initially, we expected our participants to produce written narratives closer to the end of their practicum in which they would narrate a moment during their practicum when they formatively assessed their pupils and how they felt about it. However, due to the lack of time of some of our participants to produce such a document, the researcher or his colleague had to do a phone interview recording in which the participants would simply talk about their experience with assessment as a student before his or her teacher education programme, while in the programme (how he or she learned about it) and as a student teacher on practicum. Nonetheless, we were still able to analyze our data using Clandinin and Connelly's (2000) three-dimensional analysis approach and obtain rich findings.

Finally, another limitation was the fact that we were not able to identify pre-service teachers' core beliefs as we previously expected. Based on our results, we found that identifying pre-service teachers' core beliefs would require collecting data during their first year as in-service teachers since many of their assessment practices were based on their associate teacher's own beliefs and practices. However, despite not being able to identify their core beliefs, the beliefs that were identified in our study already demonstrate the importance of teacher educators, associate teachers and university supervisors to acknowledge pre-service teachers' prior beliefs as these beliefs have a direct impact on pre-service teachers' professional development.

3. FURTHER RESEARCH

3.1 Pre-Service and In-Service Teachers' Beliefs and Practices Related to Assessment

Our study not only furthers our understanding of the impacts of pre-service ESL teachers' beliefs on how they construct their knowledge about formative assessment throughout their teacher education program, but it also highlights the needs of a deeper understanding of this matter. Based on our findings, we believe that further research in the form of a longitudinal study would be beneficial to examine and compare pre-service teachers' beliefs at the beginning of their first year, at the end of their program, and finally after their first year of teaching, in order to identify how their beliefs and practices have evolved. This study would permit one to go even further than we were able to as it would allow for the collection of data on what students have learned in the course of their program and what they have applied in their own classrooms, and thereby identify their core and peripheral beliefs and how to perhaps adapt or alter them (Haney & McArthur, 2002; Phipps & Borg, 2009).

3.2 Teacher Education Courses that Develop Assessment Literacy

Our results also expose the need for investigating how pre-service teachers learn to assess in other teacher education courses that promote assessment literary. In order to measure pre-service teachers' assessment literacy, one could use assessment literacy questionnaires at the end of said courses (DeLuca et al., 2013; Mertler, 2004; Volante & Fazio, 2007; Xu & Brown, 2016). By having pre-service teachers completing assessment questionnaires, teacher educators would not only be making sure that their courses cover contents related to assessment, but these questionnaires themselves would also serve as tools to have pre-service teachers review the content covered throughout the semester. As highlighted by our findings, pre-service teachers do learn about assessment during their teaching methods courses. However, we also found that some pre-service teachers also struggle to transfer new theory acquired in their teaching methods courses to their practices if this new knowledge cannot be directly applied in their assessment practices. In our study, that was the case for Marc-Antoine. As previously seen, he claimed not being able to

apply the concept of differentiation (learned in his last teaching methods course) to his practicum due to the fact of not having any students with learning disability. However, his classmate Annabelle was able to make this transfer as she claimed to have differentiating her assessments. Another option to improve this situation would be to have pre-service teachers discuss in pairs or in small groups how the content learned in their course could be applied to their teaching (and assessment) practices. Furthermore, these group discussions would not only make sure pre-service teachers mastered the content covered in their courses but would also allow them an opportunity to challenge and reflect on the impact their beliefs could have on their practices (Borg, 2003; Hollingsworth, 1989; Nias et al., 1992).

4. RECOMMENDATIONS

4.1 Identifying Pre-Service Teachers' Prior Beliefs

As stated throughout this study, teacher educators, associate teachers and university supervisors must try to identify pre-service teachers' beliefs and expectations at the beginning of their course (practicum) in order to provide them with the adequate support. Therefore, teacher educators should take into consideration pre-service teachers' expectations and beliefs while preparing and teaching their courses in order to provide pre-service teachers with meaningful preparation (Borg, 2003; Hollingsworth, 1989). In addition, we also believe that teacher educators should work more in collaboration with associate teachers and university supervisors to help pre-service teachers bridge the possible gap between theories acquired in their university coursework and their practice. This collaboration could be in the form of informing associate teachers and university supervisors with the content pre-service teachers are acquiring every semester so they (associate teachers and university supervisors) can help pre-service teachers link the knowledge acquired in their on-campus courses with their practicum experiences to bridge the gap (Nias, Southworth & Campbell, 1992). In addition, we agree with Cochran-Smith (2003) who states that learning to teach "involves both learning new knowledge, questions, and practices, and, at the same time, unlearning some long-held ideas, beliefs, and practices, which are often difficult to uproot" (p. 9). In other words, associate teachers and university practicum supervisors should help

pre-service teachers challenge their prior-beliefs and practices so that they could be open to new ones.

4.2 Increasing the Support Given to Associate Teachers and University Supervisors

In addition, based on our findings, we also believe that universities should better support associate teachers and university supervisors in terms of how to adequately prepare pre-service teachers to teach and assess. Despite the recommendations and support given by the university to associate teachers and university supervisors, based on our participants' statements, we can infer that there are still some associate teachers and university supervisors who believe that their main role is to provide pre-service teachers with teaching tips and techniques on how to teach. Moreover, we also found associate teachers who required pre-service teachers to follow their teaching approaches and assessment practices. By being obliged to follow an assessment practice that he or she might not believe in, pre-service teachers are being prevented from trying and testing any new assessment knowledge acquired during the university classes. As a consequence, pre-service teachers are not able to reflect or challenge their own beliefs and practices while on practicum, which could have negative impacts on their professional development.

5. EDUCATIONAL IMPORTANCE OF THE STUDY

Overall, the study shows that despite some changes and improvements in their professional formation in recent years, teacher education programmes often still have little influence upon pre-service teachers' beliefs and practices. One of the elements that is contributing to this phenomenon is the lack of communication/partnership between schools and universities: many associate teachers (mentor teachers) do not know what university-level teacher educators teach pre-service teachers, while many teacher educators might not be aware of the schools' realities in terms of assessment and evaluation. In other words, teacher educators should work more in collaboration with associate teachers in order to find out about the current realities and needs of their classrooms. In turn, this would allow pre-service teachers to make more in-depth links and connect the knowledge and tools taught in their on-campus courses with the knowledge and tools they develop while on practicum. In terms of evaluation and assessment, while on

practicum, pre-service teachers should have more opportunities to test or try and reflect upon some of the assessment techniques and approaches from their courses. One way of providing such opportunities is to have an "on-site assessment course", in which pre-service teachers would have more concrete experiences to learn the theories that underpin a method or approach. Then, they would be provided with the opportunity to apply them in a real classroom context and, finally, reflect on the outcomes with the support of their university instructor/professor.

In addition, the results of this study highlight the need for teacher educators, associate teachers and university supervisors to take pre-service teachers' beliefs and prior experiences into consideration while preparing their courses in order to provide them with meaningful and adequate preparation. In addition, our study furthers our understanding of the impacts of pre-service ESL teachers' beliefs on how they construct their knowledge about formative assessment throughout their teacher education programme.

In terms of the implications of our findings for teacher education programmes, although our programme does seem to provide adequate support and preparation, we believe that it still lacks collaboration between teacher educators, practicum supervisors and associate teachers in order to find out about the current realities and needs of the Quebec classroom. This can be done by reinforcing the links between practicum and university courses such as by developing partnership projects with schools. Many studies focused on the impacts of implementing school-university partnership (Barab & Duffy, 2000; Margolis, 2007) or community-based field experiences (Cofey, 2010; Koerner & Abdul-Tawwab, 2006; Seidl & Friend, 2002) on pre-service teachers' professional development. For instance, Margolis (2007) conducted a study with seven mentor teachers that received support before and during a school year for how to explicitly teach pre-service teachers strategies and skills to be effective teachers. Among the findings, the author states that once the associate teachers had established a relationship with their pre-service teachers and expectations had been made clear, they were able to "enact a variety of innovative teacher education strategies, geared towards sharing the mentor teachers' thinking and developing the student teachers' thinking" (Margolis, 2007, p. 89). As discussed in the previous chapter, the associate teachers support and pre-service teachers' expectations were also two main elements that we were identified in our study that influence how pre-service teachers' beliefs and practices

related to formative assessment evolve. Therefore, only building partnerships with schools will not provide pre-service teachers with more adequate support and preparation. As many authors also alert, building partnership projects (school-based and community based) also requires close guidance and further investigation in terms of making sure the goals of the programmes are being respected by associate teachers (Ore, 2010) so that schools are not seen as a place to put knowledge into practice (Barab & Duffy, 2000; Zeichner, 2010).

Preparing new teachers is important for the future. Finding ways of improving teacher preparation through research is crucial for the profession to continue to grow and evolve. Through research, we are not only able to identify missing elements in our programmes, but also suggest improvements and changes in order to make sure pre-service teachers are graduating with all the necessary tools to teach and assess. In addition, research not only informs us of the reality that our pre-service teachers face but also helps us understand their perspectives and points of view. Pre-service teachers have a lot to tell us and they want to be heard. Studying the programme from the students' point of view allows us to better understand what students actually learn from what we are offering them. Despite improvements in teacher education, research shows that we still have a long way to go in terms of what is possible to be enhanced in our programmes. Finally, we believe that studying our own programmes serves as a motivation since we are able to see our progress in improving them.

REFERENCES

Abdel Latif, M. (2012). Teaching a Standard-Based Communicative English Textbook Series to Secondary School Students in Egypt: Investigating Teachers' Practices and Beliefs. *English Teaching: Practice and Critique*, *11*(3), 78-97.

Abric, J.C., (1989), L'étude expérimentale des représentations sociales. In : Jodelet, D. (Ed.), *Les représentations sociales*, Paris : PUF, 189-203.

Agee, J. M. (1997). Readers Becoming Teachers of Literature. *Journal of Literacy Research*, *29*(3), 397-431.

Allal, L. & Mottier Lopez, L. (2005). Formative assessment of learning: A review of publications in French. In *Formative assessment: Improving learning in secondary classrooms* (pp. 241- 64). Paris: OECD.

Allen, D. D., & Flippo, R. F. (2002). Alternative Assessment in the Preparation of Literacy Educators: Responses from Students. *Reading Psychology, 23*(1), 15-26.

Allen, J. M., & Wright, S. E. (2014). Integrating Theory and Practice in the Pre-Service Teacher Education Practicum. *Teachers and Teaching: Theory and Practice*, *20*(2), 136-151.

Almarza, G. G. (1996). Student foreign language teachers' knowledge growth. In D. Freeman & J.C. Richards (Eds.), *Teacher Learning in Language Teaching* (pp. 50–78). Cambridge: CUP.

Altet, M. (2008). Rapport à la formation, à la pratique, aux savoirs et reconfiguration des savoirs professionnels par les stagiaires. In P. Perrenoud, M. Altet, C. Lessard et L. Paquay (dir.), *Conflits de savoirs en formation des enseignants. Entre savoirs issus de la recherche et savoirs issus de l'expérience* (p. 91-105). Bruxelles: de Boeck.

Ball, D. L. (1992). Teaching mathematics for understanding: What do teachers need to know about the subject matter? In M. Kennedy (Ed.), *Teaching academic subjects to diverse learners* (pp. 63–83). New York: Teachers College Press.

Barab, S. A., & Duffy, T. (2000). From practice fields to communities of practice. *Theoretical foundations of learning environments, 1*(1), 25-55.

Barahona, M. (2014). Preservice teachers' beliefs in the activity of learning to teach English in the Chilean context. *Cultural-Historical Psychology*, *10*(2), 116-122.

Barcelos, A. M. F. (2006). Cognição de professores e alunos: tendências recentes na pesquisa de crenças sobre ensino e aprendizagem de línguas [Teachers and students cognition: recent trends in research on beliefs about teaching and learning languages]. In Vieira-Abrahão M. H, Barcelos, A. M. F. (Orgs.) *Crenças e Ensino de Línguas* (pp. 15- 42). Campinas: Pontes.

Barcelos, A.M.F., & Kalaja, P. (2011). Introduction to "Beliefs about SLA Revisited." *System*, *39*(3), 281-289.

Barnes, N, Fives, H. & Dacey, C. M. (2014). In Fives, H., & Gill, M. G. (Eds.). (2014). *International Handbook of Research on Teacher Beliefs* (pp. 284-301). New York, NY: Routledge.

Basturkmen, H. (2012). Review of research into the correspondence between language teachers' stated beliefs and practices. *System*, *40*(2), 282-295.

Beck, C., & Kosnik, C. (2000). Associate teachers in preservice education: Clarifying and enhancing their role. *Journal of Education for Teaching, 26*(3), 207-224.

Belam, P.V. (2004). *A interação entre as culturas de avaliar de uma professora de LE (Inglês) e de seus alunos do curso de Letras no contexto de uma universidade particular.* [The interaction between an ESL teacher's and her students' assessment cultures in a private university context.] Dissertation (Master's in Applied Linguistics), Instituto de Biociências, Letras e Ciências Exatas, UNESP, São José do Rio Preto.

Bell, J., & Pavlenko, A. (2002). Narrative Inquiry: More Than Just Telling Stories [and] Narrative Study: Whose Study Is It, Anyway? *TESOL Quarterly*, *36*(2), 207-18.

Black, P., Harrison C., Lee, C., Marshall, B., & Wiliam, D. (2004). Working Inside the Black Box: Assessment for Learning in the Classroom. *Phi Delta Kappan*, *86,* 9-21.

Black, P., & Wiliam, D. (1998). Inside the Black Box: Raising Standards Through Classroom Assessment. *Phi Delta Kappan*, *80*, 139-148.

Bliem, C. L., & Davinroy, K. (1997). *Teachers' beliefs about assessment and instruction in literacy.* National Center for Research on Evaluation, Standards, and Student Testing (CRESST), Graduate School of Education & Information Studies, University of California, Los Angeles.

Bogdan, R. C., & Bilken, S. K. (2007). *Qualitative research for education: An introduction to theory and methods*. Boston, MA: Allyn & Bacon.

Borg, S. (2003). Teacher cognition in language teaching: A review of research on what language teachers think, know, believe, and do. *Language Teaching*, *36*(02), 81-109.

Borg, S. (2011). The impact of in-service teacher education on language teachers' beliefs. *System*, 39(3), 370-380.

Borko, H., & Mayfield, V. (1995). The roles of the cooperating teacher and university supervisor in learning to teach. *Teaching and Teacher Education*, *11*(5), 501-518.

Boyle-Baise, M., & McIntyre, D. J. (2008). What kind of experiences? Preparing teachers in PDS or community settings. In M. Cochran-Smith, S. Feiman-Nemser, D. J. McIntyre, & K. E. Demers (Eds.), *Handbook of research on teacher education: Enduring questions in changing contexts* (3rd ed.; pp. 307-329). New York: Routledge/Taylor & Francis.

Britzman, D. (2003). *Practice makes practice: A critical study of learning to teach.* Albany: State University of New York Press.

Brookhart, S. M., Moss, C. M., & Long, B. A. (2009). Promoting student ownership of learning through high-impact formative assessment practices. *Journal of Multidisciplinary Evaluation*, *6*(12), 52-67.

Brown, D. H. (2000). *Principles of language learning & teaching*. (4th ed.). New York: Longman.

Brown, J.D. (2001). *Using Surveys in Language Programs.* Cambridge, UK: Cambridge University Press.

Brown, G. L. (2004). Teachers' Conceptions of Assessment: Implications for Policy and Professional Development. *Assessment in Education: Principles Policy and Practice*, *11*(3), 301-318.

Brown, G. L., Lake, R., & Matters, G. (2011). Queensland Teachers' Conceptions of Assessment: The Impact of Policy Priorities on Teacher Attitudes. *Teaching and Teacher Education*, *27*(1), 210-220.

Bryan, L. A. (2003). Nestedness of beliefs: Examining a prospective elementary teacher's belief system about science teaching and learning. *Journal of Research in Science Teaching*, *40*(9), 835-868.

Buehl, M. M., & Beck, J. S. (2015). The relationship between teachers' beliefs and teachers' practices. In H. Fives, & M. G. Gill (Eds.), *International handbook of research on teachers' beliefs* (pp. 66-84). New York: Routledge.

Bullock, S. M. (2011). *Inside teacher education: Challenging prior views of teaching and learning*. Rotterdam, The Netherlands: Sense Publishers.

Calderhead, J. (1981). Stimulated recall: A method for research on teaching. *British Journal of Educational Psychology, 51*, 211-217.

Calderhead, J. (1988). The development of knowledge structures in learning to teach. In Calderhead, J., (Ed.) *Teachers' Professional Learning.* (pp. 51-64). Sussex: Falmer Press.

Calderhead, J. (1996). Teachers: Beliefs and knowledge. In D.C. Berliner & R.C. Calfee (Eds.), *Handbook of educational psychology* (pp. 709-725). New York: Macmillan.

Calderhead, J. & Gates, P. (1993). *Conceptualizing Reflection in Teacher Development*. London: The Falmer Press.

Calderhead, J., & Robson, M. (1991). Images of teaching: Student teachers' early conceptions of classroom practice. *Teaching and Teacher Education*, *7*(1), 1-8.

Campbell, S.S. (2012). *Taking it to the field: Teacher candidate learning about equity-oriented mathematics teaching in a mediated field experience*. Unpublished doctoral dissertation, University of Washington-Seattle, College of Education, Seattle, WA.

Carless, D. (2005). Prospects for the implementation of assessment for learning. *Assessment in Education: Principles, Policy & Practice*, *12*(1), 39-54.

Carter, K. (1990). Teachers' knowledge and learning to teach. In W. R. Houston (Ed.), *Handbook of research on teacher education* (pp. 291-310). New York: Macmillan.

Carter, K. (1993). The place of story in the study of teaching and teacher education. *Educational researcher*, 5-18.

Choy, D., Wong, A. F., Goh, K. C., & Ling Low, E. (2014). Practicum experience: Pre-service teachers' self-perception of their professional growth. Innovations In *Education & Teaching International, 51*(5), 472-482.

Clandinin, D. J., & Connelly, F. M. (2000). *Narrative inquiry: Experience and story in qualitative research*. San Francisco: Jossey-Bass.

Clark, C.M. and Peterson, P.L. (1986) Teachers' Thought Processes. In Wittrock, M.C., Ed., *Handbook of Research on Teaching*, 3rd Edition, Macmillan, New York, 255-296.

Clarke, A., Triggs, V., & Nielsen, W. (2014). Cooperating teacher participation in teacher education: A review of the literature. *Review of educational research, 84*(2), 163-202.

Clift, R., & Brady, P. (2005). Research on methods, courses, and field experiences. In M. Cochran-Smith & K. Zeichner (Eds.), *Studying teacher education: The report of the AERA Panel on Research and Teacher Education* (pp. 309-424). Mahwah, NJ: American Educational Research Association and Lawrence Erlbaum.

Cochran-Smith, M. (2003). Learning and unlearning: the education of teacher educators. *Teaching and Teacher Education*, *19*(1), 5-28.

Cochran-Smith, M. (2005). The new teacher education: For better or for worse? *Educational Researcher*, *34*(7), 3-17.

Coffey, H. (2010). "They taught me": The benefits of early community-based field experiences in teacher education. *Teaching and Teacher Education, 26*(2), 335-342.

Connelly, F. M., & Clandinin, D. J. (1988). *Teachers as Curriculum Planners. Narratives of Experience.* Teachers College Press, 1234 Amsterdam Ave., New York, NY.

Connelly, F. M., & Clandinin, D. J. (1990). Stories of experience and narrative inquiry. *Educational Researcher, 19* (5), 2-14.

Cowie, B., & Bell, B. (1999). A model of formative assessment in science education. *Assessment in Education: Principles*, *Policy & Practice, 6*(1), 101-116.

Crandall, J. A. (2000). Language teacher education. *Annual Review of Applied Linguistics*, 20, 34-55.

Crooks, T. (1988). The impact of classroom evaluation on students. *Review of Educational Research, 58*(4), 438-481.

Daly, N. (2009). Not empty vessels: New Zealand pre-service additional language teacher identity. *Waikato Journal of Education*, *14*(1), 5-14.

Darling-Hammond, L. (2006). *Powerful teacher education: Lessons from exemplary programs*. San Francisco: Jossey- Bass.

Davis, D. S., & Neitzel, C. (2011). A self-regulated learning perspective on middle grades classroom assessment. *The Journal of Educational Research*, *104*(3), 202-215.

DeCapua A., & Wintergerst A.C. (2005). Assessing and validating a learning styles instrument. *System*, *33* (1), pp. 1-16.

Delandshere, G., & Jones, J. H. (1999). Elementary Teachers' Beliefs about Assessment in Mathematics: A Case of Assessment Paralysis. *Journal of Curriculum and Supervision*, *14*(3), 216-40.

DeLuca, C. (2012). Promoting inclusivity through and within teacher education programs. *Journal of Education for Teaching: International Research and Pedagogy*, *38*(5), 551-569.

DeLuca, C., Chavez, T., Bellara, A., & Cao, C. (2013). Pedagogies for preservice assessment education: supporting teacher candidates' assessment literacy development. *Teacher Educator*, *48*(2), 128-142.

DeLuca, C., & Klinger, D. A. (2010). Assessment literacy development: identifying gaps in teacher candidates' learning. *Assessment in Education: Principles, policy & practice*, *17*(4), 419-438.

DeLuca, C., & Lam, C. Y. (2014). Preparing teachers for assessment within diverse classrooms: an analysis of teacher candidates' conceptualizations. *Teacher Education Quarterly, 41*(3), 3-24.

Dillon, D., & O'Connor, K. (2011). What should count as evidence in education reform—and why is it so hard to use it? In T. Falkenberg, & H. Smits (Eds.), *The question of evidence in research in teacher education in the context of teacher education program review in Canada* (1) (pp. 69-85). Winnipeg, MB: Faculty of Education of the University of Manitoba. Retrieved from http://www.umanitoba.ca/education/TEResearch/Book%20on%20Evidence%20(Volume%202).pdf

Dirksen, D. J. (2011). Hitting the reset button: Using formative assessment to guide instruction. *Phi Delta Kappan*, *92*(7), 26.

Dixon, H., Hawe, E., & Parr, J. (2011). Enacting Assessment for Learning: The beliefs / practice nexus. *Assessment in Education: Principles, Policy and Practice*, *18*(4), 365-379.

Dörnyei, Z. (2007). *Research methods in applied linguistics: Quantitative, qualitative, and mixed methodologies*. Oxford: Oxford University Press.

Dörnyei, Z. (2010). *Questionnaires in second language research: Construction, administration, and processing* (2nd ed.). London: Routledge.

Duff, P. A., & Bell, J. S. (2002). Narrative research in TESOL: Narrative inquiry: More than just telling stories. *TESOL Quarterly*, 36(2), 207-213.

Durand, M.-J. & Chouinard, R. (2006). *L'évaluation des apprentissages. De la planification de la démarche à la communication des résultats*. Montréal: Hurtubise HMH.

Eby, L. T., McManus, S. E., Simon, S. A., & Russell, J. E. (2000). The Protégé's Perspective Regarding Negative Mentoring Experiences: The development of a taxonomy. *Journal of Vocational Behavior*, *57*(1) 1-21.

Falkenberg, T. (2010). Introduction: Central issues of field experiences in Canadian teacher education programs. In T. Falkenberg, & H. Smits (Eds.), *Field experiences in the context of reform of Canadian teacher education programs* (1) (pp. 1-50). Winnipeg, MB: Faculty of Education of the University of Manitoba. Retrieved from https://home.cc.umanitoba.ca/~falkenbe/Publications/Falkenberg_&_Smits_(2010)_(vol.1).pdf

Fazio, X., & Volante, L. (2011). Preservice science teachers' perceptions of their practicum classrooms. *Teacher Educator*, *46*(2), 126-144.

Feiman-Nemser, S. & Beasley, K. (1997). Mentoring as assisted performance: the case of co-planning. In V. Richardson (Ed.), *Constructivist teacher education* (pp. 108-126). London: Falmer Press.

Fives, H., & Buehl, M. M. (2012). Spring cleaning for the "messy" construct of teachers' beliefs: What are they? Which have been examined? What can they tell us? In K. R. Harris, S. Graham, T. Urdan, S. Graham, J. M. Royer, & M. Zeidner (Eds.), *APA handbooks in psychology. APA educational psychology handbook, Vol. 2. Individual differences and cultural and contextual factors* (pp. 471-499). Washington, DC, US: American Psychological Association. *APA educational psychology handbook*, 2, 471-499.

Fleming, D., Bangou, F., & Fellus, O. (2011). ESL teacher-candidates' beliefs about language. *TESL Canada Journal*, *29*(1), 39-56.

Fontaine, S., Savoie-Zajc, L. et Cadieux, A. (2013). *Évaluer les apprentissages. Démarche et outils d'évaluation pour le primaire et le secondaire*. Montréal: Éditions CEC.

Fontana, A., & Frey, J. H. (1994). Interviewing: The art of science. In N. Denzin & Y. Lincoln (Eds.), *Handbook of qualitative research* (pp. 361-377). London: Sage.

Fox-Turnbull, W. (2011), Autophotography: a means of stimulated recall for investigating technology education. In C. Benson and J. Lunt (Ed.), *International Handbook of Primary Technology Education. International Technology Education Studies, Vol 7,* (pp. 195-210). Rotterdam: Sense.

Freeman, D. (1998). *Doing teacher research: From inquiry to understanding*. Boston: Heinle & Heinle.

Freeman, D., & Johnson, K. E. (1998). Reconceptualizing the Knowledge-Base of Language Teacher education. *TESOL Quarterly*, *32*(3), 397-417.

Gabillon, Z. (2005). L2 learner's beliefs: An overview. *Journal of Language and Learning*, *3*(2), 233-260.

Gabillon, Z. (2012b). Revisiting foreign language teacher beliefs. In *Frontiers of language and teaching*. *3*, 190-203. Universal Publishers.

Gill, M., & Hoffman, B. (2009). Shared planning time: A novel context for studying teachers' discourse and beliefs about learning and instruction. *The Teachers College Record*, *111*(5), 1242-1273.

Golombek, P. R., & Johnson, K. E. (2004). Narrative inquiry as a mediational space: examining emotional and cognitive dissonance in second-language teachers' development. *Teachers and Teaching: Theory and Practice, 10*(3), 307-327.

Goodman, J. (1985). What students learn from early field experiences: A case study and critical analysis. *Journal of Teacher Education*, *36*(6), 42-48.

Gooya, Z. (2007). Mathematics teachers' beliefs about a new reform in high school geometry in Iran. *Educational Studies in Mathematics*, *65*(3), 331-347.

Gouvernement du Québec. (1997). L'école, tout un program. Énoncé de politique éducative. Québec: Ministère de l'Éducation.

Gouvernement du Québec. (2001a). Programme de formation de l'école québécoise: Enseignement préscolaire et au primaire. Québec: Gouvernement du Québec.

Gouvernement du Québec. (2001b). Teacher Training: Orientations, Professional Competencies. Québec: Gouvernement du Québec.

Gouvernement du Québec. (2002a). Échelles des Niveaux de Compétences. Québec: Gouvernement du Québec.

Gouvernement du Québec. (2002b). Evaluation of Learning. Québec: Gouvernement du Québec.

Gouvernement du Québec. (2003). Policy on the Evaluation of Learning. Québec: Gouvernement du Québec.

Gouvernement du Québec. (2006a). Programme de formation de l'école québécoise. Enseignement secondaire, première cycle. Québec: Gouvernement du Québec.

Gouvernement du Québec. (2006b). L'Évaluation des apprentissages au secondaire: cadre de référence. Québec: Gouvernement du Québec.

Gouvernement du Québec. (2006c). Échelles des niveaux de compétences. Enseignement secondaire première cycle. Québec: Gouvernement du Québec.

Gouvernement du Québec. (2007a). Programme de formation de l'école québécoise. Enseignement secondaire, deuxième cycle. Québec: Gouvernement du Québec.

Gouvernement du Québec. (2007b). La Formation Générale des Jeunes : L'Éducation Préscolaire, L'Enseignement Secondaire. Retrieved from http://www.mels.gouv.qc.ca/fileadmin/site_web/documents/publications/EPEPS/Formation_jeunes/instruction2007-2008.pdf

Gouvernement du Québec. (2009a). Progression of Learning at the Elementary English as a Second Language (ESL). Québec: Gouvernement du Québec.

Gouvernement du Québec. (2009b). Échelles des niveaux de compétence. Québec: Gouvernement du Québec.

Gouvernement du Québec. (2010a). Progression of Learning at the Secondary Level English as a Second Language (ESL). Québec: Gouvernement du Québec.

Gouvernement du Québec. (2010b). A new report card for the next school year. Retrieved from http://www.mels.gouv.qc.ca/sections/publications/publications/BSM/NouvOrienEval_DocInfoEnseignants_a.pdf

Gouvernement du Québec. (2011a). Framework for the Evaluation of Learning. Québec: Gouvernement du Québec. Retrieved from https://www7.mels.gouv.qc.ca/dc/evaluation/index_en.php

Gouvernement du Québec. (2011b). Nouvelles orientations en évaluation - Premier document d'information destiné aux parents. Québec: Gouvernement du Québec. Retrieved from http://www.mels.gouv.qc.ca/references/publications/resultats-de-la-recherche/detail/article/nouvelles-orientations-en-evaluation-premier-document-dinformation-destine-aux-parents/

Graham, P. (1997). Tensions in the mentor teacher-student teacher relationship: creating productive sites for learning within a high school English teacher Education program. *Teaching and Teacher Education*, *13*(5), 513-27.

Graham P. (2005). Classroom-based assessment: Changing knowledge and practice through preservice teacher education. *Teaching and Teacher Education*, *21*(6), 607-621.

Grossman, P. L., & Richert, A. E. (1988). Unacknowledged knowledge growth: A re-examination of the effects of teacher education. *Teaching and teacher Education*, *4*(1), 53-62.

Grossman, P. L., Valencia, S.W., & Hamel, F. (1997). Preparing language arts teachers in a time of reform. In J. Flood, S. B. Heath, D. Lapp (Eds.) *A handbook for literacy educators: Research on teaching the communicative and visual arts* (pp. 407-416). New York: Macmillan.

Hagevik, R., Aydeniz, M., & Rowell, C. G. (2012). Using action research in middle level teacher education to evaluate and deepen reflective practice. *Teaching and Teacher Education, 28*(5), 675-684.

Haney, J. J., & McArthur, J. (2002). Four case studies of prospective science teachers' beliefs concerning constructivist teaching practices. *Science Education*, *86*(6), 783-802.

Harris, L. R., & Brown, G. T. (2009). The complexity of teachers' conceptions of assessment: Tensions between the needs of schools and students. *Assessment in Education: Principles, Policy & Practice*, *16*(3), 365-381.

Henrichsen, L. (2010). Basic training and resource connections for novice ESL teachers. *Journal of Adult Education*, *39*, 11-23.

Hermans, R., van Braak, J., & Van Keer, H. (2008). Development of the beliefs about primary education scale: Distinguishing a developmental and transmissive dimension. *Teaching and Teacher Education*, *24*(1), 127-139.

Hollingsworth, S. (1989). Prior beliefs and cognitive change in learning to teach. *American Educational Research Journal*, *26*(2), 160-89.

Holt-Reynolds, D. (1992). Personal history-based beliefs as relevant prior knowledge in course work. American Educational Research Journal, *29*(2), 325-49.

Horwitz, E. K. (1985). Using student beliefs about language learning and teaching in the foreign language methods course. *Foreign Language Annals, 18*(4), 333-340.

Huba, M. E. & Freed, J. E. (2000). *Learner-centered assessment on college campuses: Shifting the focus from teaching to learning*. Boston, MA: Allyn & Bacon.

Huling, L. (1998). Early field experiences in teacher education. *ERIC Digest*. Retrieved from https://files.eric.ed.gov/fulltext/ED429054.pdf

Howatt, A. P. R., H. G. Widdowson. (2004). *A History of English Language Teaching* 2nd ed. Oxford: Oxford University Press.

Hymes, D. (1972). On communicative competence. In J.B. Pride & J. Holmes (Eds.), *Sociolinguistics* (pp. 269-293). Harmondsworth, England: Penguin Books.

James, M. & Pedder, D. (2006). Professional learning as a condition for assessment for learning. In J. Gardner (ed.) *Assessment for learning: theory, policy and practice*, 27-43. London: Sage,.

Johnson, K. (2009). *Second language teacher education: A sociocultural perspective.* New York: Routledge.

Junqueira, L. & Kim, Y. (2013). Exploring the relationship between training, beliefs, and teachers' corrective feedback practices: a case study of a novice and an experienced ESL teacher. *The Canadian Modern Language Review / La revue canadienne des langues vivantes 69(*2), 181-206.

Kagan, D. M. (1992). Implications of research on teacher belief. *Educational Psychologist*, *27*(1), 65-90.

Kissau, S. P., & Algozzine, B. (2013). Foreign language student teaching: do supervisor qualifications really matter? *Foreign language annals*, *46*(2), 175-190.

Kitchen, J., & Petrarca D. (2016). Approaches to teacher education. In J. Loughran & M.J. Hamilton (Eds.), *International Handbook of teacher Education* (vol. 1, pp. 137-186). Spinger EBook. Retrieved from http://www.springer.com/gp/book/9789811003646

Koerner, M. E., & Abdul-Tawwab, N. (2006). Using community as a resource for teacher education: A case study. *Equity & Excellence in Education, 39*(1), 37-46.

Koerner, M., Rust, F., & Baumgartner, F. (2002). Exploring roles in student teaching placements. *Teacher Education Quarterly*, 29(2), 35-58.

Korthagen, F. (2001). A reflection on reflection. In F. Korthagen, J. Kessels, B. Koster, B. Lagerwerf, & T. Wubbels (Eds.), *Linking practice and theory: The pedagogy of realistic teacher educatio*n (pp. 51-68). London: Lawrence Erlbaum Associates.

Korthagen, F. J., & Kessels, J. M. (1999). Linking theory and practice: changing the pedagogy of teacher education. *Educational Researcher*, *28*(4), 4-17.

Korthagen, F., & Vasalos, A. (2005). Levels in reflection: core reflection as a means to enhance professional growth. *Teachers and Teaching: Theory and Practice*, *11*(1), 47-71.

Korthagen, F. & Wubbels, T. (2001). Learning from practice. In F. Korthagen, J. Kessels, B. Koster, B. Lagerwerf, & T. Wubbels (Eds.), *Linking practice and theory: The pedagogy of realistic teacher education* (pp. 32-50). London: Lawrence Erlbaum Associates.

Kosnik, C., & Beck, C. (2009). *Priorities in teacher education: The 7 key elements of pre-service preparation*. New York: Routledge.

LaBoskey, V. K., & Richert, A. E. (2002). Identifying good student teaching placements: A programmatic perspective. *Teacher Education Quarterly, 29*(2), 7-34.

Lal, S., Suto, M., & Ungar, M. (2012). Examining the potential of combining the methods of grounded theory and narrative inquiry: a comparative analysis. *The Qualitative Report*, *17*(21), 1-22. Retrieved from https://nsuworks.nova.edu/tqr/vol17/iss21/1.

Laurier, M.D., Tousignant, R., & Morissette, D. (2005). *Les principes de la mesure et de l'évaluation des apprentissages* (3e éd.). Montréal: Gaëtan Morin.

Le Cornu, R. (2009). Building resilience in pre-service teachers. *Teaching and Teacher Education, 25*, 717-723.

Le Cornu, R., & Ewing, R. (2008). Reconceptualising professional experiences in pre-service teacher education… reconstructing the past to embrace the future. *Teaching and Teacher Education, 24*(7), 1799-1812.

Lee, I., & Coniam, D. (2013). Introducing assessment for learning for EFL writing in an assessment of learning examination-driven system in Hong Kong. *Journal of Second Language Writing*, *22*(1), 34-50.

Levin, B. B. (2015). Development of teachers' beliefs. In H. Fives & M. G. Gill (Eds.), *International Handbook of Research on Teachers' Beliefs* (pp. 48-66). Routledge Taylor & Francis Group: New York and London.

Lichtman, M. (2006). *Qualitative research in education*: *A user's guide*. Thousand Oaks, CA: Sage.

Lieberman, A. (1995). Practices that support teacher development: Transforming conceptions of professional learning. *Phi Delta Kappan*, *76*, 591-596.

Lortie, D. (1975). *Schoolteacher: A sociological study*. Chicago: University of Chicago Press.

Margolis, J. (2007). Improving relationships between mentor teachers and student teachers: Engaging in a pedagogy of explicitness. *The New Educator*, *3*, 75-94.

Mavrommatis, Y. (1997). Understanding assessment in the classroom: Phases of the assessment process—the assessment episode. *Assessment in Education: Principles, Policy & Practice, 4*(3), 381-400.

McAlpine, L., Eriks–Brophy, A., & Crago, M. (1996). Teaching beliefs in Mohawk classrooms: Issues of language and culture. *Anthropology & Education Quarterly*, 27(3), 390-413.

McLaughlin, M. (1997). Rebuilding teacher professionalism in the United States. In A. Hargreaves & R. Evans (Eds.), *Buying teachers back*. (pp. 77-93). Buckingham, England: Open University Press.

McLoughlin, C., Brady, J., Lee, M.J. and Russell, R. (2007). Peer-to-peer: an e-mentoring approach to developing community, mutual engagement and professional identity for pre-service teachers. In *Australian Association for Research in Education Conference*, Fremantle, WA.,

Melzi, G. & Caspe, M. (2007). Research approaches to literacy, narrative, and education. In N.H. Hornberger, & A.K. King (Eds). *Encyclopedia of Language and Education*. (pp. 151-164). Berlin: Springer.

Mertler, C. A. (2003). *Preservice Versus Inservice Teachers' Assessment Literacy: Does Classroom Experience Make a Difference*? Retrieved from http://files.eric.ed.gov/fulltext/ED482277.pdf

Mertler, C. A. (2009). Teachers' assessment knowledge and their perceptions of the impact of classroom assessment professional development. *Improving Schools*, *12*(2), 101-113.

Mesquita, A., Thomas, L. (2016). Becoming Confident and Competent Assessors of Student Language Learning: Discussions with Novice Teachers about Learning to Assess in a TESL Program. In M., Hirschkorn, J., Mueller, J. (Eds.). (2016). *What Should Canada's Teachers Know? Teacher Capacities: Knowledge, Beliefs and Skills*. (pp. 322-345). Retrieved from: https://drive.google.com/file/d/0B-36OcipMmoPbTdia2hrN1F5RjQ/view

Moscovici, S. (2000) *Social Representations. Explorations in Social Psychology*. Cambridge, UK: Polity Press.

Muñoz, A. P., Palacio, M., & Escobar, L. (2012). Teachers' beliefs about assessment in an EFL context in Colombia. *Profile Issues in Teachers Professional Development*, 14(1), 143-158.

Neibling, J. (2014). *Teachers' Conceptions Toward Type of Assessment: Grade Level and State Tested Content Area* (Doctoral dissertation, University of Kansas). Retrieved from https://libprddspap.lib.ku.edu/bitstream/handle/1808/15138/Neibling_ku_0099M_13381_DATA_1.pdf?sequence=1&isAllowed=y

Nespor, J. (1987). The role of beliefs in the practice of teaching. *Journal of Curriculum Studies,19*, 317-328.

Nias, J., Southworth, G., Campbell, P., & Campbell, P. (1992). Whole school curriculum development in the primary school: development in the primary school. Retrieved from https://ebookcentral.proquest.com

Nolan, J. & Hoover, L. (2004). *Teacher supervision and evaluation: Theory into practice*. New York: John Wiley and Sons/Jossey-Bass.

Nunan, D. (1992). *Research methods in language learning.* Cambridge: Cambridge University Press.

Pajares, M. F. (1992). Teachers' beliefs and educational research: cleaning up a messy construct. *Review of Educational Research*, *62*(3), 307-333.

Paterno, J. (2001). Measuring success: A glossary of assessment terms. In *Building cathedrals*: *Compassion for the 21st century*. Retrieved from http://www.gallaudet.edu/documents/assessmentglossary.pdf

Peacock, M. (2001). Pre-service ESL teachers' beliefs about second language learning: A longitudinal study. *System*, *29*(2), 177-195.

Phipps, S., & Borg, S. (2009). Exploring tensions between teachers' grammar teaching beliefs and practices. *System*, *37*, 380–390. http://dx.doi.org/10.1016/j.system.2009.03.002

Popham, W. J. (2000). Assessing Mastery of Wish-List Content Standards. *The NASSP Bulletin*, *84*, 620: 30-36.

Pu, C. (2012). Narrative Inquiry: Preservice Teachers' Understanding of Teaching English Learners. *AILACTE Journal*, 91-18.

Rajuan, M., Beijaard, D., & Verloop, N. (2007). The Role of the Cooperating Teacher: Bridging the Gap between the Expectations of Cooperating Teachers and Student Teachers. *Mentoring & Tutoring: Partnership in Learning*, *15*(3), 223-242.

Russell, T. (1988). From pre-service teacher education to first year of teaching: A study of theory and practice. In J. Calderhead (Ed.), *Teachers' Professional Learning* (pp.13-34). London: Falmer.

Russell, T. (2017). Improving the quality of practicum learning: Self-study of a faculty member's role in practicum supervision. Studying teacher education: *Journal of Self-study of Teacher Education Practices*, *13*(2), 193-209.

Russell, T. & Korthagen, F. (1995). *Teachers who teach teachers*. London/Washington D.C.: Falmer Press.

Rydell, R. J., & McConnell, A. R. (2006). Understanding implicit and explicit attitude change: a systems of reasoning analysis. *Journal of personality and social psychology*, 91(6), 995.

Scallon, G. (2004). *L'évaluation des apprentissages dans une approche par compétences*. Saint-Laurent, QC: ERPI.

Schön, D. A. (1983). *The reflective practitioner: How professionals think in action*. New York: Basic Books.

Schön, D. A. (1987). *Educating the reflective practicioner*. San Francisco: Jossey-Bass.

Seidl, B., & Friend, G. (2002). Leaving authority at the door: Equal-status community-based experiences and the preparation of teachers for diverse classrooms. *Teaching and Teacher Education, 18*(4), 421-433.

Shepard, L. A. (2000). The role of assessment in a learning culture. *Educational researcher*, 4-14.

Sikka, A., Nath, J. L., & Cohen, M. D. (2007). Practicing teachers' beliefs and uses of assessment. *International Journal of Case Method Research & Application*. XIX (3), 239, 253.

Smith, R. L., & Strahan, D. (1997). Preservice Middle Level Teachers' Orientation toward Teaching: Case Studies in Professional Development. *Teacher Education Quarterly*, 24(4), 33-50.

Smits, H. (2010). Introduction: The Aporia of Ideology and Utopia – Field Experiences in Teacher Education as Peril and Promise. In Falkenberg, T., & Smits, H. (Eds.). (2010). *Field experiences in the context of reform of Canadian teacher education programs* (pp. 51-66). Winnipeg, MB: Faculty of Education of the University of Manitoba.

Stiggins, R. J. (1995). Assessment literacy for the 21st century. *Phi Delta Kappan*, *77*, 238-238.

Stiggins, R. J. (2002). Assessment crisis: The absence of assessment for learning. *Phi Delta Kappan*, 83(10), 758-765.

Stiggins, R. (2004). New Assessment Beliefs for a New School Mission. *Phi Delta Kappan*, *86*(1), 22.

Song, E., & Koh, K. (2010, August). Assessment for learning: Understanding teachers' beliefs and practices. In *36th Annual Conference of the International Association for Educational Assessment (IAEA) Bangkok*, *Thailand*. Retrieved from http://www. iaea2010. com/fullpaper/104.pdf.

Tamir, P. (1991). Professional and personal knowledge of teachers and teacher educators. *Teaching and Teacher Education*, *7*(3), 263-268.

Tang, E. L. Y., Lee, J. C. K., & Chun, C. K. W. (2012). Development of teaching beliefs and the focus of change in the process of pre-service ESL teacher education. *Australian Journal of Teacher Education*, 37(5), 8.

Tang, S. (2003). Challenge and Support: The Dynamics of Student Teachers' Professional Learning in the Field Experience. *Teaching and Teacher Education*, *19*(5), 483-98.

Tardif, J. (2006). *L'évaluation des compétences. Documenter le parcours de développement*. Montréal : Chenelière Education.

Tillema, H. H. (1998). Stability and change in student teachers' beliefs about teaching. *Teachers and Teaching: Theory and Practice, 4*, 217-228.

Thomas, L. (2017). Learning to Learn about the Practicum: A Self-Study of Learning to Support Student Learning in the Field. *Studying Teacher Education, 13*(2), 165-178.

Thomas, L., Deaudelin, C., Desjardins, J., & Dezutter, O. (2011). Elementary Teachers' Formative Evaluation Practices in an Era of Curricular Reform in Quebec, Canada. *Assessment in Education: Principles, Policy & Practice*, *18*(4), 381-398.

Thompson, A. G. (1992). Teachers' beliefs and conceptions: A synthesis of the research. In D. A. Grouws (Ed.), *Handbook of research on mathematics teaching and learning: A project of the National Council of Teachers of Mathematics* (pp. 127-146). New York, NY, England: Macmillan Publishing Co, Inc.

Torrance, H., & Pryor, J. (2001). Developing formative assessment in the classroom: Using action research to explore and modify theory. *British Educational Research Journal*, *27*(5), 615-631.

Turnbull, M. (2005). Student teacher professional agency in the practicum. *Asia-Pacific Journal of Teacher Education*, *33*(2), 195–208.

Turunen, T. A., & Tuovila, S. (2012). Mind the gap. Combining theory and practice in a field experience. *Teaching Education*, *23*(2), 115.

Vanderwoude, A. (2012). The Teaching Toolbox: Reconciling Theory, Practice, and Language in a Teacher Training Course. *English Teaching Forum*, *50*(4), 2-9.

Vanhulle, S. (2009a). Savoir professionnels et construction sociodiscoursive de l'agir. *Bulletin VALS-ASLA, 90*, 167-188.

Vanhulle, S. (2009b). *Des savoirs en jeu au savoir en-je. Cheminements réflexifs et subjectivation des savoirs chez de jeunes enseignants en formation*. Berne: Peter Lang.

Verjovsky, J., & Waldegg, G. (2005). Analyzing beliefs and practices of a Mexican high school biology teacher. *Journal of Research in Science Teaching*, *42*(4), 465-491.

Vieira-Abrahão, M.H. (2006). Metodologia na investigação das crenças. In Vieira-Abrahão, M.H., Barcelos, A.M. F. (Orgs.) *Crenças e Ensino de Línguas* (pp. 219-231). Campinas: Pontes.

Volante, L., & Fazio, X. (2007). Exploring Teacher Candidates' Assessment Literacy: Implications for Teacher Education Reform and Professional Development. *Canadian Journal of Education*, *30*(3), 749-770.

Walkington, J. (2005). Becoming a Teacher: Encouraging Development of Teacher Identity through Reflective Practice. *Asia-Pacific Journal of Teacher Education*, 33(1), 53-64.

Wallace, M. (1996). Structured reflection: The role of the professional project in training ESL teachers. In D. Freeman and J. C. Richards (eds.). *Teacher Learning in Language Teaching.* (pp.281-294). Cambridge: Cambridge University Press.

Ward, J. R., & McCotter, S. S. (2004). Reflection as a visible outcome for preservice teachers. *Teaching and teacher education, 20*(3), 243-257.

Wenger, E., White, N., Smith, J. D., & Rowe, K. (2005). *Technology for Communities*. Retrieved from http://technologyforcommunities.com/CEFRIO_Book_Chapter_v_5.2.pdf

Wideen, M. F., Mayer-Smith, J., & Moon, B (1998). A critical analysis of the research on learning to teach: Making the case for an ecological perspective on inquiry. *Review of Education Research, 68*(2), 130-178.

Wiersma, W. (1995). *Research methods in education: An introduction* (6th ed.). Boston: Allyn and Bacon.

Wiggins, G. (1989). A true test: Toward more authentic and equitable assessment. *Phi Delta Kappan*, *79*(7), 703-713. Retrieved from: https://grantwiggins.files.wordpress.com/2014/01/wiggins-atruetest-kappan89.pdf

Wilcox-Herzog, A. S., Ward, S. L., Wong, E. H., & McLaren, M. S. (2014). Preschool teachers' ideas about how children learn best. In H., Fives, & M.G., Gill. (Eds.). (2014). *International Handbook of Research on Teacher Beliefs* (pp. 421-435). Routledge.

Wiliam, D., Lee, C., Harrison, C., & Black, P. (2004). Teachers Developing Assessment for Learning: Impact on Student Achievement. *Assessment in Education Principles Policy And Practice*, 11(1), 49-65.

Wiliam, D. (2010). An integrative summary of the research literature and implications for a new theory of formative assessment. In H. L. Andrade & G. J. Cizek (Eds.), *Handbook of formative assessment* (pp. 18-40). New York, NY: Taylor & Francis.

Williams, M. & Burden, R. L. (1997) *Psychology for Language Teachers* Cambridge: Cambridge University Press).

Wilson, S. M. (1990). The secret garden of teacher education. *Phi Delta Kappan*, *72*(3), 204-209.

Winterbottom, M., Brindley, S., Taber, K. S., Fisher, L. G., & Finney, J., & Riga, F. (2008). Conceptions of assessment: Trainee teachers' practice and values. *Curriculum Journal*, *19*(3), 193-213.

Witherell, C., & Noddings, N. (Eds.). (1991). *Stories lives tell: Narrative and dialogue in education*. New York: Teachers College Press.

Wolf, S.A., Hill, L., & Ballentine, D. (1999).Teaching on fissured ground: Preparing preservice teachers for culturally conscious pedagogy. In T. Shanahan & F. Rodriguez-Brown (Eds.), *Forty-eighth yearbook of the National Reading Conference* (pp. 423–436). Chicago: National Reading Conference.

Woods, D. (1996). *Teacher cognition in language teaching: Beliefs, decision-making, and classroom practice*. Cambridge: Cambridge University Press.

Worthen, B. R., Sanders, J. R., Fitzpatrick, J. L. (1997). *Program Evaluation: Alternative Approaches and Practical Guidelines.* (2nd Ed). White Plains, NY: Addison Wesley

Xu, Y., & Brown, G. T. (2016). Teacher assessment literacy in practice: A reconceptualization. *Teaching and Teacher Education, 58*, 149-162.Longman.

Zanting, A., Verloop, N. & Vermunt, J. D. (2001) Student teachers' beliefs about mentoring and learning to teach during teaching practice, *British Journal of Educational Psychology*, *71*, 57–80.

Zeichner, K. (1996). Designing educative practicum experiences for prospective teachers. In K. Zeichner, S. Melnick, & M. L. Gomez (Eds). *Currents of reform in pre-service teacher education.* (pp. 215-234). New York: Teachers College Press.

Zeichner, K. (2002). Beyond traditional structures of student teaching. *Teacher Education Quarterly, 29*(2), 59–64.

Zeichner, K. (2005), Becoming a Teacher Educator: A Personal Perspective. *Teaching and Teacher Education*. *21*, No. 2, pp. 117–124.

Zeichner, K. (2006). A research agenda for teacher education. In M. Cochran-Smith & K. Zeichner,(Eds.) *Studying teacher education: The report of the AERA panel on research and teacher education* (pp. 737-759*).* Mahwah, New Jersey: Lawrence Earlbaum Associates, Publishers.

Zeichner, K. M., & Tabachnick, B. R. (1981). Are the effects of university teacher education "washed out" by school experience? *Journal of Teacher Education, 32*(3), 7-11.

Zellermayer, M., & Tabak, E. (2006). Knowledge construction in a teachers' community of enquiry: a possible road map. *Teachers and Teaching: Theory and practice, 12*(1), 33-49.